

April 1959 • 35 Cents

Astounding SCIENCE FICTION



WHEREVER YOU ARE

By Winston P. Sanders

Make over 150 Small
Computing and Reasoning
Machines with ...

BRAINIAC®

A BETTER ELECTRIC BRAIN CONSTRUCTION KIT

EQUALS THE ORIGINAL GENIAC® electric brain construction kit (1955) **PLUS** many improvements and additions: over 600 parts—including 116 improved patented wipers so that all switches work well. Instead of covering only 33 machines, BRAINIAC gives full specifications for 151 computing, reasoning, arithmetical, logical, puzzle-solving and game-playing machines... all 33 GENIACS (1955), 13 TYNIACS (1956), and 105 BRAINIACS (1957-58), etc.

THIS IS BRAINIAC! With our Brainiac Kit K17, you can build over 150 small electric brain machines and toys which "think," compute, reason, and display intelligent behavior. Each one works on a single flashlight battery... is **FUN** to make, **FUN** to use and play with, and **TEACHES** you something new about electrical computing and reasoning circuits. All connections with nuts and bolts—no soldering required. Originated and produced exclusively by Berkeley Enterprises, Brainiac is the result of 8 years' design and development work with miniature mechanical brains including: Geniac (see "Geniacs: Small Electric Brain Machines and How to Make Them" by Edmund C. Berkeley, 64 pp., published by Geniac Project, a partnership with Oliver Garfield discontinued September 1955), Tyniac (1956), Relay Moe (automatic relay machine playing tit-tat-toe—pictured in Life Magazine, March 19, 1956), Simon (miniature automatic digital computer with 129 relays—see "Simple Simon" by E. C. Berkeley in Scientific American, November 1, 1950), Squee (electronic robot squirrel—see "Light Sensitive Electronic Beast" by E. C. Berkeley in Radio Electronics, Dec. 1951), etc.



WHAT CAN YOU MAKE WITH BRAINIAC KIT K17? Over 150 machines including: LOGIC MACHINES: Syllogism Prover, Intelligence Test, Boolean Algebra Circuits, Douglas MacDonald's Will Analyzer, A Simple Kalin-Burkhart Logical Truth Calculator, etc. GAME-PLAYING MACHINES: Tit-Tat-Toe, Nim, Wheeled Bandit, Black Match, Sundorra 21, etc. COMPUTERS: To add, subtract, multiply or divide using decimal or binary numbers, Forty-Year Calendar, Prime Number Indicator, Money-Changing Machine, etc. CRYPTOGRAPHIC MACHINES: Coders, Decoders, Lock with 15,000,000 Combinations, etc. PUZZLE-SOLVING MACHINES: The Missionaries and the Cannibals, Age-Guessing Machine, Submarine Rescue Chamber, Daisy Petal Machine, Fox-Hen-Corn & Hired Man, Uranium Space Ship and the Space Pirates, The Three Monkeys Who Spurned Evil, General Alarm at the Fortress of Drendeerle, etc. QUIZ MACHINES: History, geography, trigonometry, grammar, statistics, calculus, etc.

WHAT COMES WITH YOUR BRAINIAC KIT ...

Complete Plans, Instructions, Explanations & Hardware:

- Every part needed to build Geniacs, Tyniacs, Brainiacs—over 600 pieces including control panel, multiple switch discs, jumpers, improved wipers, bulbs, sockets, washers, wire, battery and special tools.
- Complete descriptions of 151 experiments and machines.
- Over 160 circuit diagrams including 46 exact wiring templates.
- Manual "Tyniacs: Small Electric Brain Machines and How to Make Them" by Edmund C. Berkeley, 1956, 48 pages—Includes Introduction to Boolean Algebra for Designing Circuits.
- "How to Go From Brainiacs and Geniacs to Automatic Computers" by Edmund C. Berkeley.
- Dr. Claude E. Shannon's historic 1938 paper given before the American Institute of Electrical Engineers: "A Symbolic Analysis of Relay and Switching Circuits," 12 pages.

only \$1795 ... why pay more?

BRAINIAC KIT (1958 Model) K17... the kit with limitless possibilities—backed by an organization of 10 years standing in the computer field. **\$17.95**

(For shipment west of Mississippi, add \$0¢
outside U. S. add \$1.80)

7-Day Full Refund Guarantee if Not Satisfactory

MAIL THIS COUPON

BERKELEY ENTERPRISES, Inc.

615 Washington St., R173, Newtonville 60, Mass.

Please send me Brainiac Kit K17. (Returnable in 7 days for full refund if not satisfactory—if in good condition.) I enclose \$_____ in full payment.

My Name and Address are attached

Astounding

SCIENCE FICTION

Novelettes

- Wherever You Are, *Winston P. Sanders* . . . 8
 Now Inhale, *Eric Frank Russell* 31
 Set a Thief, *H. C. Elliott* 78

Short Stories

- The Sieve, *Christopher Anvil* 54
 The Catch, *Gordon R. Dickson* 67

Serial

- The Pirates of Ersatz, *Murray Leinster* . . . 98
 (Conclusion)

Readers' Departments

- The Editor's Page 4
 In Times to Come 140
 The Analytical Laboratory 140
 The Reference Library, *P. Schuyler Miller* 141
 Brass Tacks 151

JOHN W. CAMPBELL, JR.
 Editor

KAY TARRANT
 Assistant Editor

Advertising Manager: WALTER J. McBRIDE
 H. A. Staab, Art Director

COVER BY FREAS

SYMBOL: Half past Australia

Illustrations by Freas, Martinez,
 Schaenherr and Summers

APRIL
 1959

The editorial contents have not been published before, are protected by copyright and cannot be reprinted without publisher's permission. All stories in this magazine are fiction. No actual persons are designated by name or character. Any similarity is coincidental.

Astounding SCIENCE FICTION published monthly by Street & Smith Publications, Incorporated, at 575 Madison Avenue, New York 22, N. Y. Arthur Z. Gray, President; Ralph H. Whitaker, Jr., Executive Vice-President; Robert E. Park, Vice-President and Advertising Director; Thomas H. Kaiser, Secretary-Treasurer. © 1959 by Street & Smith Publications, Inc. All rights reserved under International and Pan American Copyright Conventions. Second-class postage paid at New York, N. Y. Subscription \$3.50 for one year and \$6.00 for two years in the United States, possessions and Canada; \$4.75 for one year and \$8.00 for two years in Pan American Union, Philippine Islands and Spain. Elsewhere \$5.00 for one year and \$8.50 for two years. When possible allow four weeks for change of address. Give old address and new address when notifying us. We cannot accept responsibility for unsolicited manuscripts or art work. Any material submitted must include return postage. All subscriptions should be addressed to Subscription Department, Street & Smith Publications, Incorporated, 304 East 45th Street, New York 17, New York.

Send notice of undelivered copies on Form 3579 to: *Astounding Science Fiction*, McCall Street, Dayton 1, Ohio.

Printed in  the U. S. A.

NEXT ISSUE ON SALE

APRIL 21, 1959

\$3.50 per Year in U. S. A.

35 cents per Copy



EDITORIAL

HOLES



IN THE normal vacuum tube, the information, the signal, is carried by the presence of electrons in a vacuum. A message, a signal, to be usable as a signal, must be detectably differentiated from the background; in the vacuum tube the electrons are detectably different from the vacuum.

In a transistor, a different situation exists; in one region of the transistor, there are extra electrons present, above and beyond the normal complement of electrons in germanium crystal. Here, the presence-of-excess electrons is the signal differentiated from the background. But in the other region of the transistor, there is a deficiency of electrons; the signal-condition differs from the background by having less-than-normal electrons. This lack-of-enough-electrons is referred to as "a hole"; it is readily differentiated from the

background, because if electrons are supplied at one point, so long as there are no holes present, the electrons simply mill around like passengers in a bus station waiting for the bus. When a hole arrives, an electron pops in; there's one less passenger in the waiting room.

Perfectly pure germanium crystals—if such could be prepared!—would have neither an excess nor a deficiency of electrons . . . and nothing could be done, no signals would pass.

The system of thinking in our present culture, and in our whole tradition of thought, has centered on observing evidence-which-is-there—equivalent to the vacuum-tube system, wherein the signal is carried entirely by the presence-of-electrons in a vacuum. When there are no electrons, there is *nothing*.

I have a hunch we need to broaden our thinking techniques and learn how to think transistor-style—by ob-

serving the remarkable *absence* of evidence, which we would normally expect to be present. We need to acknowledge as informative that that - which - should - be - there - isn't—which, of course, requires that we learn what constitutes "should be," or, at least, "normally expectable."

Vacuum-tube thinking requires an Absolute system; it works on *electrons* vs. *nothing*; the transistor operates on *more than normal* vs. *less than normal*, a quasi-relativistic system, operating not against a base of *nothing-whatever*, a vacuum, but against an arbitrary base line, *normal*. In a silicon transistor, normal is fourteen electrons; in a germanium transistor, normal is thirty-two electrons. The exact value of the reference level is of no significance; it's the departure from that level that constitutes the signal.

Notice that in transistor thinking, we'd give equal signal-value to either positive or negative deviations from the reference level. The concept is fairly familiar to statisticians, of course—their work directly entails such problems, and has for a long time. Dr. Rhine's studies of psi phenomena, having been largely statistical, have long since pointed out that it's just about as remarkable for someone to score one hundred misses out of one hundred tries in coin-flipping, for example, as to score one hundred hits in one hundred tries. If a man tried to flip heads one hundred times, and got one hundred tails

in a row, it would be at least somewhat odd.

With the above concept of holes as evidence, let's observe some remarkable absence-of-normal-expectable phenomena . . . and recognize that such patterns of consistent non-appearance-of-expectables is as solid, substantial, and useful evidence as the holes in transistor electronics. Sins of omission have long been recognized; let's recognize the evidential value of omissions in other areas!

I intend to show that Science has displayed a provably biased, positively maintained negation against the entire field of psionics. That Science has maintained a dynamically active campaign to suppress, deny, and destroy evidence of the reality of psionics.

So long as holes are not considered evidence, not recognized as being true, useful bits of information, there can be no proof of a negative attitude. If a man sees his hated enemy trip, fall down, and cut an artery in his arm, knocking himself out, and the hater stands there watching his enemy bleed to death . . . you can't say he murdered him, can you? Why . . . he didn't do a thing!

First. To Prove: That such a thing as "Science," separate and apart from Scientists, exists.

It must be done by analogy—and that means immediately that my "proof" is illogical, because everyone knows that argument by analogy is not logical.

Consider a vortex—water going down a drain, say. The vortex, incidentally, is a hole—its presence is detectable by the fact that there is a lack-of-water. The vortex is, actually, a nonmaterial entity, consisting solely of a pattern of dynamic forces—gravity, resultant pressure, inertia and consequent centrifugal force, viscosity, et cetera. The vortex itself is a nonmaterial reality; in this it is like a magnetic or electric field. The vortex does *not* consist of water; it consists of the nonmaterial system of dynamic forces.

It is, of course, generated by the water molecules—but *it is not* water.

And while the water molecules in the vortex are free to continue normal thermal agitation movements, you can't say that the motions of the water molecules are *rigidly* controlled by the vortex forces. Some of the water molecules will, of course, evaporate from the throat surfaces of the vortex; the vortex forces don't absolutely control the movements of the water molecules.

But they definitely do control the molecules; it's not hard to set up a vortex a few feet deep, and at the lower end of that, the vortex forces are making the water molecules behave in a manner decidedly abnormal—they're resisting a collapsing pressure of several pounds per square inch.

Thus, at one level, we must say, "The vortex forces do not change the thermal freedom of the water molecules," while at the same time we must recognize that the vortex forces

do compel the water to behave in a totally different manner at the mechanical level. And this, in turn, does alter the individual molecule's freedoms; normally a water molecule three feet below the water level cannot escape by evaporation. In a vortex three or more feet deep, it can.

Now let's define Science as the vortexlike group-entity which is generated by scientists, but *is not composed of scientists*. It does not control their individual freedom-to-think—but it *does* impose compulsive limitations on their freedom of public (i.e., mass) behavior. A scientist is a human being . . . but not when he speaks as a scientist. If a professional scientist speaks out as an individual, contrary to the intent of his Science, he gets slapped down, hard. Science *does* impose limitations on the behavior of individual scientists—just as the vortex forces do impose limitations on the behavior of the water molecules trapped in its system.

Then if this be recognized, it becomes perfectly proper to distinguish between "what Science does" and "what scientists do," and to speak of "Science holds that . . ." without necessarily implying that scientists hold that same thing!

In a vortex, water molecules, in individual thermal agitation, are actually moving in a direction opposite to the spin of the vortex—and yet those molecules are, none the less, caught in the vortex forces.

To show that ten—fifty—a hundred individual scientists hold X to be true, then, does not have any

bearing on the proposition "Science holds X to be not-true." If I say "Psychiatry accepts the widespread use of prefrontal lobotomy," and you protest that you know a dozen psychiatrists who strongly disapprove . . . so what? I can name a hundred American citizens who have proven they believe in murder as a commercial business. This proves that America doesn't condemn murder?

O.K.—so it can be shown that Science, capitalized, and as an entity distinct from scientists, exists, and has the characteristic of being able to impose on scientists, by force, behavior patterns not their own individual choice. Whether it be called "professional ethics," or any other name, it amounts to a vortexlike force that imposes on an individual behavior not chosen by him.

Now to show that Science actively works to deny, destroy, and suppress evidence of the existence of psi factors in Reality.

They do not exist in *physical* reality; they exist, however, in Reality.

How can we distinguish between "Reality" and "hallucination" or "illusion"?

You can't do it on a basis of multiple-agreement—which is the method of ancient tradition. "Everybody knows that . . ." is invariably proven wrong, in some degree, in the long run. The Earth is *not* flat, it is *not* the center of the Universe, with sun, moon, and stars rotating about it.

There is, so far as I can see, only

one ultimate test of Reality vs. Illusion. *The measure of the Reality of a concept is the measure of its utility.* "What can you *do* with it?" in other words.

Now the flat-Earth concept can be evaluated for Reality on that basis; a modern surveyor, mapping a town, works on a flat-Earth concept. He can *do* that job within the limits of observational error, on a flat-Earth concept. The concept is, then, Real within that limitation. If he's mapping the State of New Jersey, he'll use a spherical-Earth concept. And if the Coast & Geodetic Survey is mapping Texas . . . they'll use an oblate spheroid of a particular model, because a spherical-Earth concept isn't good enough for that job.

The only agreement that really counts, in seeking multiple-agreement, is getting a world-picture *that the Universe itself agrees with.*

Since utility—achieving the intended end-result—is the test of a concept, consider for a moment the concept of a radio transmitter broadcasting information. If the transmitter is being jammed by an inimical transmitter, broadcasting a program of pure noise—the transmitter is *in reality* an hallucination. That is, *as a transmitter*, it is not-functional; it may be heating up the room in which it is kept, it may be functional as ballast on a ship carrying it—but *as a transmitter* it has been rendered hallucination. Any entity expending energy in maintaining it and operat-

(Continued on page 158)

WHEREVER....

This one, I'm afraid, is a bit confused. The bug-eyed reptilian monster is afraid of the girl, you see, and the hero doesn't know where he is, much less where the heroine is....



.. YOU ARE

BY WINSTON P. SANDERS

Illustrated by Summers



HE monster laid a taloned hand on the girl's shoulder. She jumped, startled, and whirled about to face bulging red eyes. The monster opened jaws full of teeth that glowed.

The girl wrenched free. "What the devil do you want?" she yelled.

"Eck," said the monster, stepping back a pace. "*Urgu aki, Zivar.*"

The girl advanced threateningly. "The next time you forget your manners," she snapped, "the next time you forget who I am, you peasant, may heaven protect you!"

The monster wailed and scuttled down the path, as if hoping the man would come along and save him from the girl.

Ulrica Ormstad added a few soldierly oaths and followed. She knew they were wasted; nobody understood any Terrestrial language for several thousand kilometers. (Unless, she thought scornfully, you counted Didymus Mudge. But a corpulent help he was!) Nevertheless, her emotions needed a safety valve, and she could barely speak Harakunye, let alone swear in it.

Far down underneath, she admitted her anger stemmed from loneliness. And even, it might be, fear. She was trained to face battle, or storm, or the sudden failure of human engineering under conditions never foreseen by man. The situation here, on this island, held some of those elements. But basically it was another sort of dilemma, involving a worse way to die.

Therefore Ulrica Ormstad tell back on pride. She was a major in the militechnic service of New Scythia, free-born to full rights in Clan Swenson. Let the universe beware!

Long strides carried her quickly through the jungle. Its leaves were stiff and reddish blue: vegetation on Epstein's Planet photosynthesized, but the compound used was not chlorophyl. At first the pervasive smell had sickened her a little, but she soon grew used to it. Now, when she returned to her home world, or visited Mother Earth—if she ever did—their familiar biochemistry would stink for a while.

The native glowbugs, spectacularly clustered where thickets made a twilight, or the beautiful crystal flowers, or the delicate chiming of bell-fruit, had ceased to interest her. She would swap it all for a chance to leave this hellhole.

The game trail ended and Ulrica stepped out onto a broad white beach. The ship *Geyvadigur* lay anchored inside a sheltered lagoon: for the hidden sun was close enough to raise considerable tides, even in the absence of a satellite. Boats were drawn up on the sand, where the crew had pitched conical pink tents. The sailor whom she had frightened waited timidly. Doubtless Captain Zalakun wished to question her.

Ulrica sighed. She had gone walking in the jungle just to get away from the endless struggle with Hara-kunye grammar. For one honest human conversation, in any human language, she would trade her soul.

Make it Swedish, and she'd throw in her sidearm.

Didymus Mudge emerged from one of the tents. He had been playing with a silly-looking affair inside, wooden frameworks and inclined planes, as indeed he had done for a week now. The ship's carpenter, who had been helping, squeaked at sight of Ulrica and tried to hide behind the man. Since Mudge stood only one hundred eighty centimeters tall, and even the smallest Epsteinian was three meters long including the tail, this was not very successful.

"Oh. Hello." Mudge tried to smile. "What were you doing, Miss Ormstad?"

Ulrica put hands on hips and glared downward. Mudge was slender as well as short, with sandy hair, cowlick, an undistinguished freckled face, and large blue eyes nearsighted behind contact lenses. His tattered gray zipsuit did not make him more impressive.

"I will give you three guesses," snorted the girl. "I have been making an atomic-powered aircraft with my bare hands? No. Then I have been weaving vines into a radio circuit, to call base and have them come get us? No. I have been practicing to swim all the way to Lonesome Landing? Still no. *Kors i Herrans namn!* And you are supposed to be bright enough to teach children!"

"I . . . er . . . yes," said the Earthman meekly.

Ulrica looked him up and down. She herself had the big bones and

powerful muscles of a human breed which had spent generations under the gee-and-a-half of New Scythia. It did not make her less graceful, in a full-hipped full-breasted way; on her, a salt-stained tunic and clan kilt looked good. Thick brown braids lay tightly around a face of high cheekbones, straight nose, broad firm mouth, and wide-set green eyes. Even beneath the perpetually leaden sky of this planet, her skin glowed tawny.

"And still Earth manages to be the leader of the League," she murmured. "I do not understand it. I just plain do not." Louder: "Well, what have you been tinkering with? Are you making an abstraction ladder in there, to teach semantics? Better you learn to talk with these lizards first!"

"That isn't my forte," said Mudge in a defensive tone. "You were trained from childhood to pick up languages fast, tone discrimination, mnemonics— You might as well expect me, at my time of life, to take up ballet, as learn Harakunye from scratch in a week!"

Ulrica laughed.

"What is it?" asked Mudge.

"The thought of you in tights," she chortled, "doing a *pas de deux* with an Epsteinian."

"Some people have a strange sense of humor," grumbled Mudge. He rubbed his peeling nose. Enough ultraviolet had penetrated the clouds to give his untanned hide a bad sunburn.

"I have been so busy studying,"

said Ulrica. Mirth had eased her, and she wanted to offer friendliness to this fellow castaway whom she had scarcely seen so far. "It was necessary I be able to talk with them. As soon as one sailor got restless, I let him go and started with another. I only stopped to eat and sleep. But you, what have you been working on?"

Mudge pointed to his wrist watch. "This was damaged," he said. "It kept running, and I know the precise time when it was deranged. But now it's either fast or slow, I'm not sure which. Checking it against my pulse suggests it is slow, but I have always had an irregular pulse. I—"

"*What?*" yelped Ulrica. "At this time you worry about your little tin watch?"

"It isn't either," said Mudge. "It's a very good seventeen-jewel Swiss chrono. My mother gave it to me at graduation. My graduation, that is, not hers. Though she does have a degree herself, from the same place, Boston Uni—"

"On a desert island," said Ulrica to heaven, "x thousand kilometers from the one human outpost on this entire planet, surrounded by natives of absolutely unknown culture and intentions, he worries about his graduation present. *Du store Gud!* Also *lieber Gott, nom du Dieu*, and *Bozhe moi!*"

"But wait," bleated Mudge. "It's important! Let me explain!"

Ulrica stalked down to the shore,

trailing a string of remarks which ionized the air behind her.

The sailor stood patiently at a beached rowboat. He was a typical Epsteinian, which is to say he looked rather like a small slim tyrannosaur with a bulldog face and round cox-combed head. His scales were dark-blue on top, pale below, and zebra striped; his eyes were red and bulging, his teeth phosphorescent yellow. He wore merely crossed belts, one of which held a knife and one a pouch. The data book—thank a lifetime's Amazonian training for the quick-wittedness which had made Ulrica pocket that, along with a bottle of vitamin pills, when the spaceboat exploded—said the autochthones were not actually reptiles, being warm-blooded and placental. Neither were they mammals, lacking the appropriate glands as well as hair. They looked ferocious enough, but most of the *Geyvadigur* crew had shown Yes, Master personalities.

The officers, though, appeared to be something else again.

Ulrica entered the boat. The sailor launched it, jumped in, and rowed her out to the ship. Tension gathered within her. After the captain understood she was working on his language, he had turned the dull job of helping over to his crew. A few hours ago, one of the mates—Ulrica assumed that was their status—had interviewed her briefly and gone off wagging his tail. He must have reported she was now proficient enough to talk intelligently.

The ship loomed over her. Except

for the ornate figurehead, it might at first glance have been an early Terrestrial steamer, with high stacks, monstrous sidewheels, and two schooner-rigged masts in case of emergency. Then you began to notice things. There probably wasn't a door on all Epstein's Planet, except at Lonesome Landing, likely to pinch a tail. Since the natives sat on those same organs, they had never invented chairs. The treads of all ladders, and the ratlines, were a meter apart. Ulrica had inspected the engines and been surprised to find them oil-burning steam turbines; why the craft then used paddles instead of screws could only be explained by the whimsical gods who, on Earth, had once put engines in the front of rear-wheel drive automobiles.

The *Geyvadigur* had both magnetic and spring-powered gyro compasses, but otherwise no hint of electromagnetic technology—which scuttled all hope of radioing for help. Quite likely the eternal damp atmosphere accounted for the Harakuni failure to study such phenomena, even though the nearby sun lit every night with fabulous auroras. Poverty of resources, or sheer historical accident, might explain the fact that there were no firearms aboard. The craft did, however, sport catapults, oil bombs, and flame throwers.

Ulrica would have felt better had her own pistol been of any use. But she had exhausted its charge against hungry sea snakes, as she and Mudge paddled their fragment of spaceboat toward this island; and when the ves-

sel went, there hadn't been time to grab extra clips.

The sailor helped her up a Jacob's ladder. The decks were littered with his fellows, polishing, holystoning, splicing, the usual nautical chores. A mate stalked about with a barbed-wire whip, touching up an occasional back to encourage progress. Ulrica stamped as haughtily as possible to the captain's cabin. (Another foreign detail. It was a thatch hut, its walls lined with a tasteful collection of weapons and Epsteinian skulls.)

Captain Zalakun bared his fangs politely as the girl entered. Beside him squatted a gaunt male with an eyeglass and a sash whereon a dozen medals tinkled together. A saw-toothed scimitar lay drawn on the table. Combats between Epsteinians, whose scales bounced back a mere slash, must be awesome.

"Ssss," greeted the captain. "Coil your tail, *Zivar*."

At least he used the aristocratic title. The only alternative Ulrica had found in Harakunye was *Yaldazir*, which seemed a contraction of a phrase meaning "Offal of an unspeakable worm." If you weren't addressed by one title, you necessarily had the other.

She hunkered and waited.

Zalakun turned toward the eyeglass. "*Zivar*," he said, "this is the monster called Orumastat, which we took from the sea with its slave four days ago." He meant Epsteinian days, of course, forty-six hours long. Turning to Ulrica: "Orumastat, this

is the most glorious Feridur of Bera-dura, who heads our expedition. You have not seen him before because he was belowdecks playing *karosi*. Now that you can talk, Feridur of Bera-dura will let you know his magnanimous will."

Ulrica struggled to follow the speech. She was by no means fluent in Harakunye. In this conversation, she often had to ask what a word meant; or sometimes the natives were baffled by her accent. But, in effect, she answered: "That would be very pleasant to know."

The language barrier strained out sarcasm. Feridur lifted his monocle. "I say, captain," he asked, "are you sure it is a bona fide warrior? It didn't even sneer at me."

"It claims to be, *Zivar*," said Zalakun uncertainly. "And after all, if I may extrude a suggestion, your magnificent memory will recall tribes we have already encountered, prepared to fight bravely but given to soft female-type words on all other occasions."

"True. Yes. True." Feridur wiggled his tail tip. "And this creature is still more alien, eh, what? Great Kastakun, how hideous it is!"

"Hey!" bristled Ulrica. Then she sat back. Perhaps this was a compliment. She didn't know.

According to the data book, all Epsteinians encountered so far by humans had been amiable fishers and farmers. In the archipelagoes fringing the Northeast Ocean they were neolithic; further west, they had begun to use iron; and cursory flights

above one of the small continents beyond had shown areas where there were cities and square-rigged ships.

The *Geyvadigur* was from Harakun, still further west—perhaps at the antipodes—and, apparently, still more advanced in technology. The vessel must have been chugging eastward for months, exploring, refueling often from the planet's many natural oil wells. Now it poised somewhere near the edge of the Northeast Ocean, with little but water ahead for half the world's circumference.

In short, this region was as strange to Zalakun and Feridur as it was to Ulrica and Mudge. By the same token, you could no more conclude what the Harakuni were like from reports on local primitives, than an eighteenth-century Martian visiting Hawaii could have predicted the character of Europeans.

It behooved her to gang warily. But gang she must.

"Well, don't just sit there," said Feridur. "Speak. Or do tricks, or something." He yawned. "Great Kastakun! And to think I left my estates because I thought this wretched expedition would be an adventure! Why, I haven't collected ten decent skulls since we weighed anchor!"

"Ah, but *Zivar*," soothed Zalakun, "what an interesting skull Orumastat has."

"True," said Feridur, perking up. "Sensational. A collector's item. That is, if Orumastat gives me enough of a fight."

"Oh, but it is a guest," objected Zalakun. "I didn't mean Orumastat personally, but warriors of its tribe, after we contact them—"

"Quiet, you low creature," said Feridur.

The captain looked distressed. He tried another approach: "Orumastat may be too soft to be worthwhile. No scales."

"The *erkuma* of Akhvaadin lacks scales," pointed out Feridur, "and yet if you meet one hand-to-hand and survive, its skull is jolly well worth fifty like yours."

"True," said Zalakun, banging his brow on the table. "I abase myself."

Ulrica stood up. The conversation seemed to be getting out of hand. "Just a moment, just a moment!" she exclaimed. "I did not come here to fight."

"No?" Feridur gaped idiotically and twiddled his eyeglass. "Not to fight? Whatever for, then?"

"It was shipwrecked, puissant one," said Zalakun.

"Eh, what? Shipwrecked? Nonsense. We haven't had any storms lately. Couldn't be shipwrecked. I mean to say, that's nonsense. Come, come, now, monster, out with it. Why are you here?"

"Shut up, you knock-kneed son of a frog!" snarled Ulrica. She kept her fraying temper just enough to say it in English.

"Eh? What say? Don't understand it. Terrible accent. If it's going to learn Harakunye, why can't it learn right? Answer me that." Feridur

leaned back sulkily and toyed with his scimitar.

Zalakun gave him a glance of frustrated exasperation, then said to the girl: "Suppose you explain yourself from the beginning."

Ulrica had dreaded that request. The upper atmosphere of this planet was so thickly clouded that you never even saw its own sun, let alone the stars. She had learned without surprise that the Harakuni thought their world was flat. Even their boldest sailors never ventured more than a few hundred kilometers from land, and that only in familiar seas where compass and log made crude dead reckoning possible.

Briefly, she was tempted to say: "Mudge and I were coming down in a small ferry from the regular supply spaceship. We were letting the autopilot bring us in on a radio beam, and know only that we were several thousand kilometers west of Lonesome Landing. I have no idea what number that word 'several' really stands for. Some freakish backblast caused the engine to explode, the jet stream seized us and flung us far off course, we came down in a torn-off section on a dying grav-unit with capricious winds blowing us about, and hit the sea near this island. Every scrap of our equipment is lost or ruined. Doubtless aircraft are hunting for us, but what chance have we of being found on an entire, virtually unmapped planet, before our vitamin pills give out and we die? For we can eat the native life, but

unless it is supplemented with Terrestrial vitamins we will soon get scurvy, beriberi, pellagra, and every other deficiency disease you can name."

But she didn't have Harakunye words to say it.

Instead, she ventured: "We are of a race different from yours. All our tribe are mighty warriors. We two went far from the island where we live, exploring in a boat that flew. But it suffered harm in the air and we fell here, where you soon found us."

"We spied your ruin descending and made haste to investigate," said Captain Zalakun. "I have been looking at the wreckage. That material like unbreakable glass is interesting, but why do you use such soft light metal instead of wood or iron?"

Ulrica sighed. "That is a long story," she answered. "There are many wonderful things we can show you, if you will only take us to our home." She was quite confident the *Geyvadigur* could reach Lonesome Landing in time. The ship must be capable of averaging at least five knots, which meant some fifteen hundred kilometers an Earth-week. The station was certainly less than five thousand kilometers away. There were pills left for three weeks; and, if necessary, several days more without vitamins would do no serious harm.

"We are anxious to know all the nations in your . . . er, in the world," continued Ulrica persuasively. "We

wish trade with them, and friendship." No need to elaborate on the civilizing program of the League. They might not appreciate that idea without advance propaganda.

"Trade?" Feridur brightened. "Skulls?"

"Well—" temporized Ulrica.

"See here," said Feridur in a reasonable tone, "either you want to fight and give a chap a chance to collect skulls, or else you're not worth contacting. Eh, what? Isn't that fair?"

"My splendid master," said Zalakun with strained politeness, "we have already discovered that few foreign peoples share the interest of us and our neighbors in craniology. There *are* other things in life, you know."

Feridur laid talons about the scimitar. His monocle glittered red. "Sso," he murmured, "you think that, eh?"

Zalakun wriggled backward on his tail. "Oh, no, your awesomeness," he said hastily. "Not at all. Of course not!"

"Oh, so you do want to expand your own collection," purred Feridur. He tested saw edges with a thumb. "Well, well! I say! Maybe you would like to add the skull of your liege lord to the museum, eh, what?"

"Oh, no, no, *Zivar*," said Zala-



kun, sweating. "Wouldn't dream of it."

"So my skull isn't good enough for you. Is that it?"

"No, *Zivar*! Your skull is a thing of beauty."

"I'll oblige you any time, you know," said Feridur. "We can go ashore right this moment and have a whack at each other, eh?"

Zalakun licked rubbery lips. "Uh," he said. "Well, the fact is—"

"Ah, I know, I know. Not a drop of sporting blood in the whole dashed ship. Great Kastakun! Well, go on, then, *Yaldazir*, talk to the monster. Two of a kind." Feridur yawned elaborately.

Ulrica felt embarrassed for the captain. After breathing hard for a while he resumed the conversation with her. "Where is this home of yours, Orumastat?"

"Somewhere . . . er . . . that way." Ulrica pointed out the window, past reefs and surf to a steel-gray eastward stretch of sea.

"Can you not be more precise? What archipelago?"

"No archipelago," said the girl. "It is a single island in the middle of an ocean. My people have seen from the air that the part of the world you must come from has many islands and two small continents, so that one is never far from land. But beyond the region where I think we are now, there is almost no land for . . . I don't know your measures. You could sail steadily for more than fifty

of your days before seeing shore again."

"I say!" Feridur straightened. "You're sure, monster?"

"Not in detail," Ulrica admitted. "But I do know there is that much water somewhere to the east, ahead of you."

"But then . . . Great Kastakun, captain! I'm glad we found that out! We're heading straight homeward again!"

"To be sure," declared Zalakun, appalled. "Why, after so long a time at sea, one could not even guess at northward or southward drift. One might miss the shore you speak of completely. Even if the wind didn't fail in so long a voyage. For we could only steam twenty days at most before our oil bunkers were dry."

"It would not be that far to my island," said Ulrica.

"Hm-m-m . . . how far?"

"I am not certain. But no more than, uh, fifteen days."

"*Fifteen days in open ocean!*" gasped Zalakun.

He sat back, tongue hanging out, speechless with horror. Feridur quizzed Ulrica through his monocle. "But I say," he objected, "what's the jolly old purpose in living so far away? Eh? It's unheard of. I mean to say, nobody lives in mid-ocean."

"Since we can fly at great speeds, we are not inconvenienced by distance," replied Ulrica. And colonizing an isolated speck would offend no natives: they didn't even realize it existed. No sense, though, in giv-

ing so pacifistic a reason to this warrior culture.

"But how do you find your way? Eh? Answer me that. Ha, ha, I've bally well got you there!" Feridur wagged a triumphant finger.

Ulrica decided that there was also no point in describing a radio net involving three small artificial satellites. "We have our methods," she said in a mysterious tone.

"By the Iron Reefs," murmured Zalakun. His tone held awe. "Of course you do! You must, or you couldn't have found that island in the first place. But to know exactly where you are, even when there's no land in sight, no current or cloud formations or— Why, that's a secret sought for as long as there have been ships!"

"We will gladly provide you with similar means," said Ulrica. "If, of course, you take us home."

"Naturally!" babbled Zalakun. He sprang to his feet, wagging his tail till the air whistled. "Jumping gods, master, what're a thousand bug-bitten skulls next to a prize like that? Just give us a line, *Zivar* Orumastat, give us a compass bearing and we'll hold true on it till you're home, though the sky fall down!"

"*Ab, nej!*" whispered Ulrica. She felt the blood sink from her face.

"What is it?" asked the captain. He came around the table and offered an arm. She leaned on it, badly in need of support.

"I just realized . . . I was so busy before that it only occurs to me now . . . I know where the island is," she

said faintly. "But I can't give you a course. I don't know where *we* are!"

When Ulrica had gone aboard ship, Ardabadur, the carpenter, followed. There he directed a gang of sailors as they unloaded the completed Foucault bob, got it into a boat and ashore. While they carried it onward, he went to the tent where Didymus Mudge was at work.

He hesitated outside. The Earthling's operations had been fascinating, but enigmatic and delicate. Ardabadur didn't want to interrupt. Finally he stuck his head through the flap.

Mudge stood hunched over his apparatus. In the days since arriving here, he had gotten it to function rather well. Oh, more accurately, Ardabadur had. They shared no words, but through gestures, drawings, and crude models Mudge had explained what he needed. Then the ship's excellent carpenter shop had prepared it for him—after which he tinkered, groaned, and sent it back for revision.

A ball of cast bronze rolled thunderously down an inclined plane. Mudge watched it while counting the swings of a small pendulum, carefully made from a leather cord and a lead weight in a leveled glass-sided box. When the ball reached ground, Mudge made a note. The Harakuni had paper and pencils. "Which is a mercy," he said aloud. "But *why* couldn't you have brought a clock along?"

Ardabadur hopped inside and

squatted respectfully. Mudge ran a hand through rumpled hair and mopped sweat off his face. "I'm sure you have some chronometry," he said. "You have probably even measured the length of the day, and its seasonal variation. I know the long twilight confuses things, clouds always hiding the sun . . . but if you averaged enough observations for enough centuries, you could do it. So why didn't you bring a clock? Knowing this planet's rotation period, I could have corrected my watch according to your timepiece by simple arithmetic."

He tapped the chrono on his wrist. "I think a momentary surge of magnetism must have affected it," he went on. "It's antimagnetic, to be sure, but a disintegrating nuclear field can produce overwhelming forces. I suppose I'm lucky to be alive at all. Well, I know from the data book how long from sunrise to sunrise, so theoretically I could use that fact to tell me how fast or slow my watch is. But in practice, the clouds complicate observation too much for anything like accuracy; and I haven't got a hundred years in which to accumulate enough data for analysis."

Ardabadur wagged his tail knowingly, as if he understood English.

"Of course, time is of no obvious importance to you on shipboard," said Mudge. "Since you can't make astronomical sightings, and you don't even know astronomical phenomena exist, you cannot have invented navigation. You possess an inaccurate

little hourglass to tell you when to change watch, and that's all."

He smiled, a weary lopsided grimace. "Well, I've gotten around the handicap," he said. "This makes my one-thousandth observation of time to roll down the plane. After calculation, I should be able to work out a very good correction factor for my watch." He patted the bulge in one hip pocket. "Do you know, my friend, I owe my life to whoever invented waterproof paper. Without it, the data book would be unreadable. It was a wet journey to this island. And this book compiles—not only the physical and mathematical constants needed anywhere in the universe—but all the information so far gathered about Epstein's Planet. Its mass, dimensions, orbital elements, rotational period, axial inclination, surface gravity, atmospheric composition, everything—or almost everything. Unfortunately, such quantities as magnetic deviation have hardly been mapped at all; otherwise I might try using that to locate us. The book does include tide tables, though, not only for Lonesome Landing but for several other selected spots, at which temperature, pelagic salinity, and whatever else occurred to the expeditions, have been measured."

He turned toward the exit. "But I am sure you came to show me something," he said. "Forgive me. I talk too much. However, it has been a very trying week on this island. I am used to talking, the feast of reason and the flow of soul and so on. My mother has always moved in in-

tellectual circles. And then, I am a teacher by profession: basic science in the elementary grades."

Ardabadur led the way over the beach. Didymus Mudge continued to chatter. Perhaps he wanted to drown out the surf. Now, with the incoming solar tide, it had grown loud, an undergroundish sinister noise to his landlubber ears. Overhead scudded smoky rainclouds, and lightning flickered, high up in the permanent gray layers. The jungle talked in the wind with a million blue tongues.

"My mother was very dubious about my coming to Epstein's Planet," he said. "I had never been farther than Luna before, and then I had letters of recommendation to people she knows. On the other hand, it was an undeniable opportunity. The scientific and cultural staff here is already of respectable size, and is due for great expansion in the near future, when intensive work begins. The tendency is for married couples to be employed, and they have children, and the children need education. On a four-year contract, I could not only save a very good salary, but make valuable friendships among highly intellectual people. If only my mother could have come too, I would never have hesitated. But no opening was available for her. She finally agreed that I had a duty to my career."

Mudge looked around. He saw nothing but drifting sand, tents that snapped in the wind, waves and the alien ship. He leaned close to Arda-

badur and hissed: "Frankly, and don't tell anyone, I thought it was high time I went somewhere by myself. I am thirty years old. After all!"

Then, blushing and stammering, he hurried on: "Miss . . . er . . . Major Orumastat isn't an instructor. Not of children, I mean. She was to organize defensive squads for the exploration teams, in case they meet hostility. Not that we would dream of provoking any such demonstration, I assure you. But—"

But by that time they had reached the Foucault bob, where a dozen sailors waited for orders. Ardabadur beamed like a picket fence and waved a hand at his creation.

Mudge examined it with care. It was as he had drawn, a hollow copper ball some one hundred and fifty centimeters across. When filled with sand, its mass would be enormous. A small loop and a very light stiff wire were affixed to the bottom. On top was a larger loop, riveted to ten meters of wire rope. As far as Mudge could see, it had been made with perfect symmetry and should give no trouble.

He said aloud: "We shall have to wait for calm weather. The wind would cause the pendulum to describe an ellipse today. But according to the data book, this region at this time of year is usually calm, so we can doubtless perform the experiment tomorrow. Let us set it all up now."

Ardabadur got his drift and barked orders. His assistants sprang to work. The sphere lay under a tall tree on the beach's edge which had

been stripped of branches. A stout gallowslike crosspiece had been erected on the trunk, thirteen meters above ground. Now a pair of sailors swarmed up and affixed the loose end of the cable, so that the copper ball hung suspended. It swayed and toned in the wind. Mudge was gratified to note that it had little tendency to move in arcs; Ardabadur's suspension was well designed.

"Why are you helping me?" he mused aloud. "You have certainly spared no pains on my behalf, though you can have no idea why I want all this work done. Is it curiosity? Or boredom? For this has been a long dull time for you to lie anchored—I suppose on our account, until your captain knows more about us. I prefer to think you feel a genuine friendship and wish to assist a being in distress. Your officers seem to be perfect brutes, but all you common crewpeople are very quiet and well-behaved. I am sure you are capable of empathy."

"*Uru's kalka kisir,*" said the Epsteinian.

"Oh," said Mudge.

Hanging the pendulum took at least an hour. At the end, though, he had it well adjusted. As the bob passed the lowest point of its arc, the cat's-whisker wire on the bottom traced a thin line in sand which had been smoothed, leveled, and wet down. Now Mudge led the sailors away; they raised the ball again and carried it to another preselected tree. Here the human mounted a ladder,

knotted a piece of light rope to the bottom loop, and tied the other end to the bole. The sphere hung four meters above ground, its cable nearly taut, ready to swing when released.

"Now we fill the globe with sand to make it heavier and thus more stable," said Mudge, "and then I believe we can, er, call it a day."

He demonstrated. The sailors formed a bucket brigade up the ladder and began loading the ball. They had almost completed that task when Ulrica Ormstad appeared.

Behind her trailed Captain Zalakun and a bemedaled, besworded, besmonocled Epsteinian whom Mudge had not seen before. Ardabadur whistled and fell on his face. The sailors tumbled from the ladder and followed suit. Mudge gaped.

"Good heavens," he said.

"This is Feridur of Beradura," explained the girl. "He owns this expedition. I mean that almost literally."

Her face was tight and anxious. Though the wind blew cool, there was sweat on her wide brow, and an uncharacteristic lock of hair had broken loose to stream over one ear.

"Mudge," she said, "we are in trouble."

"I know," he agreed.

Her temper ripped across. "Don't get sarcastic with me, you little worm!" she yelled.

"But I wasn't . . . I didn't—" Mudge swallowed. Ulrica was a beautiful sight, he thought. So, however, was a hungry tiger.

He had had no experience with

the modern frontier type of woman. His mother disapproved of them. In his inmost soul he admitted hoping he would meet a young lady on this planet, where no one would jealously interfere, who could become Mrs. Mudge. But someone well-bred and well-read, with civilized ways, please!

"What have you been doing, anyhow?" snapped Ulrica.

"I told you," said Mudge, after husking once or twice. "I have been correcting my watch. I have a correction factor now, or will as soon as I make the calculations from my data, and then we will know exact Greenwich time." He paused. "I admit that is making no allowance for relativistic laws . . . simultaneity is an approximational concept at best . . . but this is a refinement which the data book does not take into account either. So—"

"Shut your big mouth before I reach in and pull you inside out!" screamed Ulrica.

Mudge cowered.

Ulrica expressed herself richly for several seconds. Mudge would have covered his ears, but was too stunned. He had never heard most of those words. The context, though, made their meaning all too hideously evident. Good heavens! Cultivated society, conversing at tea time in Boston, seemed five hundred light-years away.

He remembered with a shock that it *was* five hundred light-years away.

A part of him gibbered that the spaceship had headed into Virgo, and surely people would not make re-

marks like this in the region of Virgo.

Reason came back to him as Ulrica ran down. She put arms akimbo and said grimly: "All right. Why do you want to know Greenwich Market Time? To say your evening prayers?"

"No," gulped Mudge. "To locate us. I mean, we have to know where we are, don't we? The data book says Lonesome Landing is at 47° 32' 4" N., and the prime meridian has been drawn through it. But we know only that we are somewhere west of there, how far we cannot tell, and have no idea if we are north or south of it. I mean—"

"You mean," growled Ulrica, "that you have read chronometric time is necessary for navigation. So you set blindly out to find the time. You gruntbrain! Don't you know longitude reckoning depends on the *comparison* of times? How can we get local noon when we can't see the sun? How can we get the height of anything, for latitude?"

She gave the copper ball a green glare. "And what, with your kind permission, is that?"

"A . . . a Foucault pendulum," said Mudge. He squared thin shoulders. "It is a classic demonstration of the fact that a planet rotates. A pendulum will hold to its own vibrational plane—in effect, the planet turns beneath it—so that cat whisker will describe a line which gradually turns through a complete circle."

Ulrica stood speechless.

"This project has a secondary value," continued Mudge with a



bit more self-confidence, "in that I am sure these Epsteinians imagine their world to be flat and fixed in space. The pendulum offers a simple proof of its rotation. Therefore they will be more inclined to accept on faith our assertion that the planet is a spheroid, and this in turn will lead them to follow our advice when—"

"Great," said Ulrica. "Leaping. Blue. Balls. Of. Radioactive. Muck."

Then the blast came. Mudge huddled away from it. The girl raged

over his head, like the remote lightning come down to earth.

"For your blank blank information, Mister Didymus Blank Blank Mudge, I have just been talking to the captain and Feridur. They don't know which dash deleted asterisk way to steer for the obscenity station. How could they? Without a reasonably accurate vector—distance within a few hundred kilometers, direction within a compass point or less—they could search the double dash four star exclamation point ocean for an anathematized year without coming

near Lonesome Blank Blank Landing. And of course they won't even attempt it. If they cruised obscenely around in any kind of crudely expressed search pattern, they'd lose their own unprintable way and risk never finding land again. If we don't give them a deep blue bearing and a sulfurous distance estimate, they're going to up anchor and head for accursed home tomorrow. AND YOU WANT TO GIVE A LECTURE ON COPERNICAN ASTRONOMY!"

"Oooh," moaned Ardabadur, trembling.

Exactly, thought Mudge, also trembling.

He opened his mouth, but nothing came out. At that moment, Feridur twittered. Ulrica stopped in mid-career and faced around. Feridur put the monocle in his eye and repeated the question. Captain Zalakun said something in a protesting tone of voice. Feridur made a sweet reply at which the captain shuddered and backed away. Ulrica turned quite pale.

Mudge listened intently. He heard Feridur ask, with painful distinctness: "*Uluka's kuruta yaldazir itoban urnalik?*"

"*Yalgesh, Zirvan,*" said Ulrica, in a small subdued voice and a Swedish accent. "*Obunadun baladur erkedi-vir.*"

The saw-toothed blade rasped from Feridur's sheath. He giggled. "*Yagatun!*"

Ulrica clenched her fists. Then, suddenly, she spat at the Harakuni's feet. The color flamed back in her

cheeks. "*Yagatun zoltada, Yaldazir Fridur!*" she snapped.

"Eep!" said Feridur, horrified at such manners. Captain Zalakun sought to remedy the breach, but got nowhere. The sailors burrowed in the sand, trying to make themselves inconspicuous. Finally Zalakun himself went off in giant kangaroo leaps toward the tents.

"What is this?" whispered Mudge.

Ulrica said in a harsh tone: "Feridur wanted to know if you can locate the Earth base, since I can't. When I admitted you had only been playing games, he said he would fight me. I have explained that the vitamin pills are necessary for our life, so he knows we would soon die in any case when he turns homeward. He wants to take my skull in combat instead, for his collection."

"What?" squeaked Mudge. The island revolved around him. He stumbled, feeling blackness in his head. Ulrica caught him.

"Don't be afraid," she said in the same metallic voice. "You are not worth fighting—no glory in taking your head. They will keep you for a pet, I suppose . . . and you will have my pills . . . and it is barely possible, in that extra time a search party will chance upon you."

"But this is ghastly!" stammered Mudge. "I mean, it isn't done!"

"It seems to be." Ulrica managed a bleak grin. "Maybe I can take Feridur's head. Then I inherit his titles, properties, and skull collection, and can sail the ship where I will. Not

that we have much chance anyway, without a bearing." She sighed. "This may be the better way to die."

"But listen—" wailed Mudge.

Zalakun returned with a sword, shouldered past him and said something to the girl. She nodded. Mudge tried to get a word in edgewise. "Shut up," said Ulrica. Zalakun finished by handing her the weapon.

"In case you are interested," said Ulrica, "he was explaining the rules. In effect, there aren't any. Either party can use tricks, assistants—"

Zalakun flickered a glance at Feridur, who was polishing his monocle several meters off. The captain leaned over and whispered something to the girl. She smiled a suddenly gentle smile and gave his scaly back a futuristic pat.

"What is it?" gibbered Mudge. "What did he say?"

"He said no one will help Feridur," she answered curtly. "They don't like him. Of course, they are too afraid of him to take my side either. He's the leading phrenologist in Harakun."

"But . . . I can . . . I mean, that is, I have to tell you—"

"Oh, be quiet," she said. "What use would you be? Stand aside out of my way, that is all you can do."

"But you don't have to fight this barbaric thing!" yelled Mudge. "It isn't necessary! If you would only listen to me for five minutes, I can explain—"

"Shut up," she cut him off. He tried to continue. She whirled her blade past his nose. He jumped back-

ward, choking. She laughed with a real, if deplorably coarse mirth, and said more kindly: "It is too late anyhow. I insulted him on purpose. Whatever I said now, he would insist on disposing of me."

Zalakun wrung her hand and scuttled off to the sidelines as Feridur turned around. The aristocrat screwed his eyeglass in more firmly, hefted his sword, and minced across the sand. Ulrica crouched, waiting. The wind fluttered her kilt and the one loose lock of hair.

Mudge put his back against the tree bole and tried to think. But that was like trying to run through glue. This was the U.S.P. Standard adventure-story situation, a beautiful girl threatened by a bulging-eyed monster, and he was a man, and it was up to him to save her, but—Feridur's blade whipped up and then down. It hit Ulrica's with a clang that hurt Mudge's eardrums. The blow would have gone halfway through him.

He huddled next to the comfortable bulk of good old Ardabadur, and prayed that the beautiful girl would save him from the bug-eyed monster.

"*Yava's!*" cried Feridur.

He bounced back from Ulrica's attack. She knew fencing, but had no skill with these awkward weapons. She closed in, though, a rush and a sweep. Somehow it got past Feridur's guard, and steel teeth rattled across his scales. They did no harm. His own blade moved with a combination of thrust and stroke. Ulrica retreated,

fending him off by mere fury of blows. He grinned and stalked around her, so that she must keep turning to face him. His reach was not much greater than hers, but he had every advantage of height, stride, and strength.

All at once, like a snake, his weapon darted in, slid past Ulrica's and touched her thigh. She got away in time, with only a thin red slash, but Mudge felt sick. "Son of an improper union," she muttered, and cut loose again. "You want to saw me up alive, huh? We'll see!"

She leaped in, hewing low. Feridur hissed as she opened a gash on his left shin. Her metal was already up to block his answering cut. He brought his edge down, chopping at her ankles. She jumped high, the sword whined beneath her feet, she came down on it and it was torn from Feridur's grasp.

"Now, you miserable alligator!" she exclaimed, and assaulted his head. A small sailor emitted a very small cheer, then covered his mouth and looked around in terror of having been overheard.

Feridur whirled about, raised his tail, and struck Ulrica amidships. The wind whoofed from her. She rolled three meters and climbed dizzily to her feet. Feridur picked up his sword and advanced with deliberation. The watching sauroids looked distressed, Captain Zalakun twisted his hands together, but all seemed nailed to the spot.

"Look out!" screamed Mudge. Impulsively, he darted forward.

Ulrica waved him back. She still clutched her sword. The free hand dabbed at a bruised cheek. "No," she said. "One is enough."

"But you are a woman!" he cried. "Give me that! I'll fight for you!"

She managed a ghost of a laugh. "Dear little Didymus," she whispered. "I am an Ormstad of Clan Swenson. Get out of my way."

Feridur closed in for the kill as Mudge staggered back to Ardabadur's side. The Harakuni noble paused to readjust his monocle. He tittered.

Then Ulrica exploded into motion. Her sword became a blur, yelled in the air, banged on Feridur's iron, knocked down his guard and slashed him across the shoulder. He hissed and jumped back. Ulrica followed, shouting.

She's splendid! thought Mudge wildly. *They don't make girls like that in Boston!* He blushed and corrected himself: *I mean, there aren't any girls like that in Boston.*

Feridur rallied and beat off the attack. Ulrica retreated. Through wind and surf, above the steady belling of steel, Mudge could hear how she clawed for breath. And once she stumbled from exhaustion. Feridur would kill her in minutes.

"I should go out and die with her." Mudge licked dry lips. "Really, I should, if I can't do anything else. I feel so useless."

"*Akrazun kulakisir,*" said Ardabadur comfortingly.

"It wouldn't be against the rules," chattered Mudge. "She told me anything goes. I could help. Only . . .

only . . . to be absolutely honest, as my mother always told me to be, I'm scared."

Feridur drew blood again: a flesh wound, no more, but Ulrica's sword was now slow and heavy in her fingers.

"Of course, later I can explain, and maybe they will take me to Lonesome Landing after all," babbled Mudge. "But no, I haven't her training, I could not possibly learn the language before my vitamins ran out. I am done for, too. You had all this work for nothing, Ardabadur. Now you will never know why you made—"

The thought came to him. It was not exactly a blinding flash of intuition. Or perhaps it was. He didn't notice. By the time he was fully conscious of having an idea, it was already in execution.

"Ulrica!" he shouted. "Miss Ormstad! Major Ormstad! Get him . . . maneuver him onto . . . that cleared, wet space in the sand . . . under that tree . . . keep him there . . . and look out!"

Meanwhile he snatched a knife from Ardabadur's belt and went up the ladder. The carpenter whistled alarm and started after him. Frantically, Mudge kicked him on the crest, while sawing at the cord and yelling at Ulrica.

"Miss Ormstad! Work him onto that level damp patch! Quickly! Hold him . . . just a minute . . . please! I beg of you!"

Ulrica, fighting for another second of existence, heard his thin screech

and croaked out of pain and despair: "Let me die by myself, Earthling."

Somehow, without planning to, scarcely aware of it, Didymus Mudge inflated his lungs and roared in a heroic tenor, so that even Zalakun jumped: "*Profanity dash blasphemy blue and green, green starred et cetera! Do what I blank unprintable tell you before I commit unspeakable violence upon your defamity person!*"

Whether the memory of drill sergeants ten years ago came back and possessed her, or whether she was suddenly given hope—or for whatever reason—Ulrica sprang away from Feridur and ran. He bounded after, jeering at her. Ulrica crossed the wet sand, twirled about, and met his charge. Saw teeth locked together as the blades met. Feridur began to shove hers aside. She threw her last strength into resisting him, though she felt it drain from muscle and bone.

Didymus Mudge cut the cord on his Foucault sphere.

Loaded with hundreds of kilos of sand, it swung across the beach, gathering velocity all the way. Mudge fell off the ladder, onto Ardabadur. They went down in a tangle of arms, legs, and tail. By the time he had picked himself up, it was all over, and the Harakuni were howling as one jubilant mob around Ulrica.

Mudge limped toward her. He wanted to see, if he could, how much of an arc his pendulum was describing. Yes . . . there was definitely an elliptical path, but a narrow one. That tendency should be quite obviated

when he made the official experiment tomorrow. He would burn the rope then, rather than cut it, to liberate the bob without transverse forces . . . He ducked as it whistled past. So huge a thing had not lost much energy when it hit Feridur.

Mudge saw what had happened to Feridur. For a while he was not a well man.

Captain Zalakun released Ulrica's hand, which he had been pumping in a most Earthlike fashion, and regarded the mess. Finally he shook his head and clicked his tongue. "Dear me, *Zivar Orumastat*," he said. "You really must chastise your slave. No doubt he meant well, but he has completely ruined what would have been a very fine egg-shaped skull."

A while afterward, when they sat in the captain's cabin, eating the Epsteinian food—which humans found dreary—and drinking the Epsteinian wine—which was forty proof and not bad at all—Zalakun asked Ulrica: "*Arvadur zilka itoban urnalik?*"

The girl blinked beautiful, through slightly blurred green eyes above her goblet, in Mudge's direction. "He wants to know if you can indeed navigate us, Didymus," she said.

Mudge blushed. "Well, not exactly," he admitted. "Until we reach base and get a radio network receiver, I mean. But then he will be able to navigate himself. Ahem!" He burped and reached for his own cup. "I can, however, tell him to a fair approximation how far away Lonesome Landing is, and in what direc-

tion. That should suffice, since he has good compasses and is independent of the wind. Rather, I will be able to tell him this tomorrow, when I have all the data and finish the calculations."

"But how?" She leaned forward. "How, Didymus?" she repeated softly.

"Well," he said after catching his breath, "the data book gives the location of base, so if I know our present co-ordinates, it becomes a simple problem in spherical trigonometry, for which the book supplies tables, to determine—"

"Yes, yes," she said in a slightly less worshipful tone. "But how do you locate us?"

"It is a problem of finding latitude and longitude," he said. He took another swig of wine. It buzzed in his head, but helped steady his voice. Once he got going, the lecture habits of a decade took over and he talked automatically. "Ahem! We had the data book and a watch, but the watch had been running awry since the moment of the crash, so that I no longer knew within several hours what time it was. Now if I could only observe something which took a precisely known time, such as ten seconds, I could compare the watch, see by what factor it was fast or slow, and apply the correction.

"I looked up the standard value of Epsteinian gravity, one thousand twelve centimeters per second squared. Local variations would not make any significant difference. A pendulum describing short arcs has a period

which is a function only of length and gravity. The carpenter made me a good small pendulum and I clocked it."

"Yes, but," said Ulrica. She paused. "But," she repeated muzzily. Wine had hidden her own weariness from her, but it made the wine all the more effective. "But you don't know the length of the pendulum. Not with, *urp*, precision."

"No," said Mudge. "However, the distance covered by a falling body is a function only of gravity and time. Air resistance can be disregarded for low speeds. I repeated Galileo's experiment, dropping a weight through a fixed height. Actually, I rolled it down an inclined plane—so did he—to get a greater length and thus a smaller percentage of error. Though I did not know the effective height in absolute units, I took care to see that it was an integral multiple of the pendulum length; and I measured the time for a ball to roll down in terms of pendulum oscillations. I therefore have two equations in two unknowns, easy to solve. When I have computed all my data, taking the average of many observations, I will know the length of the pendulum in centimeters and, what I really wanted, the length of its period in seconds. From this I can correct the time shown by my watch."

Ulrica smiled, stretched out on the floor and laid her head on Mudge's lap.

"Goodness gracious!" Mudge gasped. "What are you doing, Miss Ormstad?"

"You were speaking about falling bodies," she murmured.

"But . . . I mean . . . Major Ormstad!"

"Ulrica is my name," she whispered.

Zalakun's leathery face assumed an avuncular expression. He said something which Mudge was afraid meant, "Bless you, my children."

"Well," gulped Mudge. "Well, if you're tired, Miss . . . er . . . Major . . . I can find a pillow."

"I'm quite comfy," said the girl. She reached up and patted his cheek. "I'm sorry for losing my temper. I wouldn't have if I had known you better, Didymus. Know what? You're cute."

Mudge ran a finger beneath his collar and plunged terror-stricken onward: "Since this planet has only solar tides, I was spared one complication. To be sure, tidal patterns are not simple; but a wave crossing the almost empty Northeast Ocean will not be much delayed either. To further help me, the data book has tide tables not only for Lonesome Landing, but for selected spots elsewhere. This will assist interpolation. In short, when my watch has been corrected, I will be able to identify any local tide as one which passed Lonesome Landing so-and-so many hours ago. Knowing the speed at which it travels, I thereby know how far westward it has come in that interval—hence, our longitude."

Ulrica frowned, with a finger laid to her chin. "No," she said, "'cute'

is the wrong word. I mean, you are cute, but you are also very much of a manfolk. When you shouted at me to do what you wanted, it was poetic. Like a saga."

"I forgot myself," said Mudge wretchedly.

"I'll help you forget some more," beamed Ulrica.

"*Ugvan urunta*," said Zalakun.

Mudge interpreted this as a request to continue his discourse. "Latitude is a simpler problem, solvable with greater accuracy," he said very fast. "I know the angular velocity of this planet's rotation, three hundred sixty degrees in forty-six hours. Knowing the date, I could calculate latitude from length of daylight, except for the clouds. A Foucault pendulum affords a much better method. It would not turn at all at the equator; it would turn with maximum speed at either pole; in between, the rate is a sine function of latitude. I can use geometrical constructions to mark off a precise angle such as ninety degrees, clock the time

the pendulum needs to sweep through this angle, and thence compute our latitude. And, and, and that's all," he finished. "I should have the information for you by nightfall tomorrow, and we can start out next day. To be sure, accumulated uncertainties will doubtless cause us to miss the island, but not by much. We can find it in time if we scout about. Though I suppose we need only come within a few hundred kilometers to be spotted by an aircraft—"

Ulrica chuckled. "And so we will arrive as great heroes," she said, "very romantic, and perhaps we had better not disappoint people about the romantic side of it, no? *Käre lille* Didymus. This is going to be so pleasant a sea voyage."

Mudge swallowed hard and wondered how to escape.

"*Istvaz tuli*," said Zalakun with a fatuous smirk.

Mudge threw him a look of wild appeal, as if somehow the bug-eyed monster could save the man from the girl.



NOW

INHALE

BY ERIC FRANK RUSSELL

They say Nero fiddled while Rome burned; Taylor's problem was to play games while his executioner burned....

Illustrated by Martinez



His leg irons clanked and his wrist chains jingled as they led him into the room. The bonds on his ankles compelled him to move at an awkward shuffle and the guards delighted in urging him onward faster than he could go. Somebody pointed to a chair facing the long table. Somebody else shoved him into it with such force that he lost balance and sat down hard.

The black brush of his hair jerked as his scalp twitched and that was his only visible reaction. Then he gazed

across the desk with light gray eyes so pale that the pupils seemed set in ice. The look in them was neither friendly nor hostile, submissive nor angry; it was just impassively and impartially cold, cold.

On the other side of the desk seven Gombarians surveyed him with various expressions: triumph, disdain, satisfaction, boredom, curiosity, glee and arrogance. They were a humanoid bunch in the same sense that gorillas are humanoid. At that point the resemblance ended.

"Now," began the one in the middle, making every third syllable a grunt, "your name is Wayne Taylor?"

No answer.

"You have come from a planet called Terra?"

No response.

"Let us not waste any more time, Palamin," suggested the one on the left. "If he will not talk by invitation, let him talk by compulsion."

"You are right, Eckster." Putting a hand under the desk Palamin came up with a hammer. It had a pear-shaped head with flattened base. "How would you like every bone in your hands cracked finger by finger, joint by joint?"

"I wouldn't," admitted Wayne Taylor.

"A very sensible reply," approved Palamin. He placed the hammer in the middle of the desk, positioning it significantly. "Already many days have been spent teaching you our language. By this time a child could have learned it sufficiently well to understand and answer questions."

He favored the prisoner with a hard stare. "You have pretended to be abnormally slow to learn. But you can deceive us no longer. You will now provide all the information for which we ask."

"Willingly or unwillingly," put in Eckster, licking thin lips, "but you'll provide it anyway."

"Correct," agreed Palamin. "Let us start all over again and see if we can avoid painful scenes. Your name is Wayne Taylor and you come from a planet called Terra?"

"I admitted that much when I was captured."

"I know. But you were not fluent at that time and we want no misunderstandings. Why did you land on Gombar?"

"I've told my tutor at least twenty times that I did it involuntarily. It was an emergency landing. My ship was disabled."

"Then why did you blow it up? Why did you not make open contact with us and invite us to repair it for you?"

"No Terran vessel must be allowed to fall intact into hostile hands," said Taylor flatly.

"Hostile?" Palamin tried to assume a look of pained surprise but his face wasn't made for it. "Since you Terrans know nothing whatever about us what right have you to consider us hostile?"

"I wasn't kissed on arrival," Taylor retorted. "I was shot at coming down. I was shot at getting away. I was hunted across twenty miles of land, grabbed and beaten up."



NOW INHALE

"Our soldiers do their duty," observed Palamin virtuously.

"I'd be dead by now if they were not the lousiest marksmen this side of Cygni."

"And what is Cygni?"

"A star."

"Who are you to criticize our soldiers?" interjected Eckster, glowering.

"A Terran," informed Taylor as if that were more than enough.

"That means nothing to me," Eckster gave back with open contempt.

"It will."

Palamin took over again. "If friendly contact were wanted the Terran authorities would send a large ship with an official deputation on board, wouldn't they?"

"I don't think so."

"Why not?"

"We don't risk big boats and important people without knowing what sort of a reception they're likely to get."

"And who digs up that information?"

"Space scouts."

"Ah!" Palamin gazed around with the pride of a pygmy who has trapped an elephant. "So at last you admit that you are a spy?"

"I am a spy only in the estimation of the hostile."

"On the contrary," broke in a heavily jowled specimen seated on the right, "you are whatever we say you are—because we say it."

"Have it your own way," conceded Taylor.

"We intend to."

"You can be sure of that, my dear Borkor," soothed Palamin. He returned attention to the prisoner. "How many Terrans are there in existence?"

"About twelve thousand millions."

"He is lying," exclaimed Borkor, hungrily eying the hammer.

"One planet could not support such a number," Eckster contributed.

"They are scattered over a hundred planets," said Taylor.

"He is still lying," Borkor maintained.

Waving them down, Palamin asked, "And how many ships have they got?"

"I regret that mere space scouts are not entrusted with fleet statistics," replied Taylor coolly. "I can tell you only that I haven't the slightest idea."

"You must have *some* idea."

"If you want guesses, you can have them for what they are worth."

"Then make a guess."

"One million."

"Nonsense!" declared Palamin. "Utterly absurd!"

"All right. One thousand. Or any other number you consider reasonable."

"This is getting us nowhere," Borkor complained.

Palamin said to the others, "What do you expect? If we were to send a spy to Terra would we fill him up with top-secret information to give the enemy when caught? Or would we tell him just enough and only

enough to enable him to carry out his task? The ideal spy is a shrewd ignoramus, able to take all, unable to give anything."

"The ideal spy wouldn't be trapped in the first place," commented Eckster maliciously.

"Thank you for those kind words," Taylor chipped in. "If I had come here as a spy, you'd have seen nothing of my ship much less me."

"Well, exactly where were you heading for when forced to land on Gombar?" invited Palamin.

"For the next system beyond."

"Ignoring this one?"

"Yes."

"Why?"

"I go where I'm told."

"Your story is weak and implausible." Palamin lay back and eyed him judicially. "It is not credible that a space explorer should bypass one system in favor of another that is farther away."

"I was aiming for a binary said to have at least forty planets," said Taylor. "This system has only three. Doubtless it was considered relatively unimportant."

"What, with us inhabiting all three worlds?"

"How were we to know that? Nobody has been this way before."

"They know it now," put in Eckster, managing to make it sound sinister.

"This one knows it," Palamin corrected. "The others do not. And the longer they don't, the better for us. When another life form starts pok-

ing its snout into our system we need time to muster our strength."

This brought a murmur of general agreement.

"It's your state of mind," offered Taylor.

"What d'you mean?"

"You're taking it for granted that a meeting must lead to a clash and in turn to a war."

"We'd be prize fools to assume anything else and let ourselves be caught unprepared," Palamin pointed out.

Taylor sighed. "To date we have established ourselves on a hundred planets without a single fight. The reason: we don't go where we're not wanted."

"I can imagine that," Palamin gave back sarcastically. "Someone tells you to beat it and you obligingly beat it. It's contrary to instinct."

"Your instinct," said Taylor. "We see no sense in wasting time and money fighting when we can spend both exploring and exploiting."

"Meaning that your space fleets include no warships?"

"Of course we have warships."

"Many?"

"Enough to cope."

"Pacifists armed to the teeth," said Palamin to the others. He registered a knowing smile.

"Liars are always inconsistent," pronounced Eckster with an air of authority. He fixed a stony gaze upon the prisoner. "If you are so careful to avoid trouble, why do you *need* warships?"

"Because we have no guarantee that

the entire cosmos shares our policy of live and let live."

"Be more explicit."

"We chevvy nobody. But someday somebody may take it into their heads to chevvy us."

"Then you will start a fight?"

"No. The other party will have started it. We shall finish it."

"Sheer evasion," scoffed Eckster to Palamin and the rest. "The technique is obvious to anyone but an idiot. They settle themselves upon a hundred planets—if we can believe that number, which I don't! On most there is no opposition because nobody is there to oppose. On the others the natives are weak and backward, know that a struggle is doomed to failure and therefore offer none. But on any planet sufficiently strong and determined to resist—such as Gombar for instance—the Terrans will promptly treat that resistance as unwarranted interference with themselves. They will say they are being chevved. It will be their moral justification for a war."

Palamin looked at Taylor. "What do you say to that?"

Giving a deep shrug, Taylor said, "That kind of political cynicism has been long out of date where I come from. I can't help it if mentally you're about ten millennia behind us."

"Are we going to sit here and allow ourselves to be insulted by a prisoner in chains?" Eckster angrily demanded of Palamin. "Let us recommend that he be executed. Then we

can all go home. I for one have had enough of this futile rigmarole."

Another said, "Me, too." He looked an habitual me-tooer.

"Patience," advised Palamin. He spoke to Taylor. "You claim that you were under orders to examine the twin system of Halor and Ridi?"

"If by that you mean the adjacent binary, the answer is yes. That was my prescribed destination."

"Let us suppose that instead you had been told to take a look over our Gombarian system. Would you have done so?"

"I obey orders."

"You would have come upon us quietly and surreptitiously for a good snoop around?"

"Not necessarily. If my first impression had been one of friendliness, I'd have presented myself openly."

"He is dodging the question," insisted Eckster, still full of ire.

"What would you have done if you had been uncertain of our reaction?" continued Palamin.

"What anyone else would do," Taylor retorted. "I'd hang around until I'd got the measure of it one way or the other."

"Meanwhile taking care to evade capture?"

"Of course."

"And if you had not been satisfied with our attitude you'd have reported us as hostile?"

"Potentially so."

"That is all we require," decided Palamin. "Your admissions are tantamount to a confession that you are a spy. It does not matter in the least

whether you were under orders to poke your inquisitive nose into this system or some other system, you are still a spy." He turned to the others. "Are we all agreed?"

They chorused, "Yes."

"There is only one proper fate for such as you," Palamin finished. "You will be returned to your cell pending official execution." He made a gesture of dismissal. "Take him away."

The guards took him by simple process of jerking the chair from under him and kicking him erect. They tried to rush him out faster than he could go, he stumbled in his leg irons and almost fell. But he found time to throw one swift glance back from the doorway and his strangely pale eyes looked frozen.

When the elderly warder brought in his evening meal, Taylor asked, "How do they execute people here?"

"How do they do it where you come from?"

"We don't."

"You don't?" The warder blinked in amazement. Putting the tray on the floor, he took a seat on the bench beside Taylor and left the heavily-barred grille wide open. The butt of his gun protruded from its holster within easy reach of the prisoner's grasp. "Then how do you handle dangerous criminals?"

"We cure the curable by whatever means are effective no matter how drastic, including brain surgery. The incurable we export to a lonely planet reserved exclusively for them.

There they can fight it out between themselves."

"What a waste of a world," opined the warder. In casual manner he drew his gun, pointed it at the wall and pressed the button. Nothing happened. "Empty," he said.

Taylor made no remark.

"No use you snatching it. No use you running for it. The armored doors, multiple locks and loaded guns are all outside."

"I'd have to get rid of these manacles before I could start something with any hope of success," Taylor pointed out. "Are you open to bribery?"

"With what? You have nothing save the clothes you're wearing. And even those will be burned after you're dead."

"All right, forget it." Taylor rattled his irons loudly and looked disgusted. "You haven't yet told me how I'm to die."

"Oh, you'll be strangled in public," informed the warder. He smacked his lips for no apparent reason. "All executions take place in the presence of the populace. It is not enough that justice be done, it must also be seen to be done. So everybody sees it. And it has an excellent disciplinary effect." Again the lip smacking. "It is quite a spectacle."

"I'm sure it must be."

"You will be made to kneel with your back to a post, your arms and ankles tied behind it," explained the warder in tutorial manner. "There is a hole drilled through the post at the

level of your neck. A loop of cord goes round your neck, through the hole and around a stick on the other side. The executioner twists the stick, thereby tightening the loop quickly or slowly according to his mood."

"I suppose that when he feels really artistic he prolongs the agony quite a piece by slackening and retightening the loop a few times?" Taylor ventured.

"No, no, he is not permitted to do that," assured the warden, blind to the sarcasm. "Not in a final execution. That method is used only to extract confessions from the stubborn. We are a fair-minded and tender-hearted people, see?"

"You're a great comfort to me," said Taylor.

"So you will be handled swiftly and efficiently. I have witnessed many executions and have yet to see a sloppy, badly performed one. The body heaves and strains against its bonds, the eyes stick out, the tongue protrudes and turns black and complete collapse follows. The effect is invariably the same and is a tribute to the executioner's skill. Really you have nothing to worry about, nothing at all."

"Looks like I haven't, the way you put it," observed Taylor dryly. "I'm right on top of the world without anything to lose except my breath." He brooded a bit, then asked, "*When* am I due for the noose?"

"Immediately after you've finished your game," the warden informed.

Taylor eyed him blankly. "Game? What game? What do you mean?"

"It is conventional to allow a condemned man a last game against a skilled player chosen by us. When the game ends he is taken away and strangled."

"Win or lose?"

"The result makes no difference. He is executed regardless of whether he is the winner or the loser."

"Sounds crazy to me," said Taylor frowning.

"It would, being an alien," replied the warden. "But surely you'll agree that a person facing death is entitled to a little bit of consideration if only the privilege of putting up a last minute fight for his life."

"A pretty useless fight."

"That may be. But every minute of delay is precious to the one concerned." The warden rubbed hands together appreciatively. "I can tell you that nothing is more exciting, more thrilling than a person's death-match against a clever player."

"Is that so?"

"Yes. You see, he cannot possibly play in normal manner. For one thing, his mind is obsessed by his impending fate while his opponent is bothered by no such burden. For another, he dare not let the other win—and he dare not let him lose, either. He has to concentrate all his faculties on preventing a decisive result and prolonging the game as much as possible. And, of course, all the time he is mentally and morally handicapped by the knowledge that the end is bound to come."

"Bet it gives you a heck of a kick," said Taylor.

The warder sucked his lips before smacking them. "Many a felon have I watched playing in a cold sweat with the ingenuity of desperation. Then at last the final move. He has fainted and rolled off his chair. We've carried him out as limp as an empty sack. He has come to his senses on his knees facing a crowd waiting for the first twist."

"It isn't worth the bother," decided Taylor. "No player can last long."

"Usually they don't but I've known exceptions, tough and expert gamers who've managed to postpone death for four or five days. There was one fellow, a professional *alizik* player, who naturally chose his own game and contrived to avoid a decision for sixteen days. He was so good it was a pity he had to die. A lot of video-watchers were sorry when the end came."

"Oh, so you put these death-matches on the video?"

"It's the most popular show. Pins them in their chairs, I can tell you."

"Hm-m-m!" Taylor thought a bit, asked, "Suppose this video-star had been able to keep the game on the boil for a year or more, would he have been allowed to do so?"

"Of course. Nobody can be put to death until he has completed his last game. You could call it a superstition, I suppose. What's more, the rule is that he gets well fed while playing. If he wishes he can eat like a king. All the same, they rarely eat much."

"Don't they?"

"No—they're so nervous that their

stomachs refuse to hold a square meal. Occasionally one of them is actually sick in the middle of a game. When I see one do that I know he won't last another day."

"You've had plenty of fun in your time," Taylor offered.

"Quite often," the warder admitted. "But not always. Bad players bore me beyond description. They give the video-watchers the gripes. They start a game, fumble it right away, go to the strangling-post and that's the end of them. The greatest pleasure for all is when some character makes a battle of it."

"Fat chance I've got. I know no Gombarian games and you people know no Terran ones."

"Any game can be learned in short time and the choice is yours. Naturally you won't be permitted to pick one that involves letting you loose in a field without your irons. It has to be something that can be played in this cell. Want some good advice?"

"Give."

"This evening an official will arrive to arrange the contest after which he will find you a suitable partner. Don't ask to be taught one of our games. No matter how clever you may try to be your opponent will be better because he'll be handling the familiar while you're coping with the strange. Select one of your own planet's games and thus give yourself an advantage."

"Thanks for the suggestion. It might do me some good if defeat meant death—but victory meant life"

"I've told you already that the result makes no difference."

"There you are then. Some choice, huh?"

"You can choose between death in the morning and death the morning after or even the one after that." Getting up from the bench, the warder walked out, closed the grille, said through the bars, "Anyway, I'll

bring you a book giving full details of our indoor games. You'll have plenty of time to read it before the official arrives."

"Nice of you," said Taylor. "But I think you're wasting your time."

Left alone, Wayne Taylor let his thoughts mill around. They weren't pleasant ones. Space scouts belonged



to a high-risk profession and none knew it better than themselves. Each and every one cheerfully accepted the dangers on the ages-old principle that it always happens to the other fellow, never to oneself. But now it had happened and to him. He ran a forefinger around the inside of his collar which felt a little tight.

When he'd dived through the clouds with two air-machines blasting fire to port and starboard he had pressed alarm button D. This caused

his transmitter to start flashing a brief but complicated number giving his co-ordinates and defining the planet as enemy territory.

Earlier and many thousands of miles out in space he had reported his intention of making an emergency landing and identified the chosen world with the same co-ordinates. Button D, therefore, would confirm his first message and add serious doubts about his fate. He estimated that between the time he'd pressed the button and the time he had landed the alarm-signal should have been transmitted at least forty times.

Immediately after the landing he'd switched the delayed-action charge and taken to his heels. The planes were still buzzing around. One of them swooped low over the grounded ship just as it blew up. It disintegrated in the blast. The other one gained altitude and circled overhead, directing the search. To judge by the speed with which troops arrived he must have had the misfortune to have dumped himself in a military area full of uniformed goons eager for blood. All the same, he'd kept them on the run for six hours and covered twenty miles before they got him. They'd expressed their disapproval with fists and feet.

Right now there was no way of telling whether Terran listening-posts had picked up his repeated D-alarm. Odds were vastly in favor of it since it was a top priority channel on which was kept a round-the-clock watch. He didn't doubt for a moment that, hav-



ing received the message, they'd do something about it.

The trouble was that whatever they did would come too late. In this very sector patrolled the *Macklin*, Terra's latest, biggest, most powerful battleship. If the *Macklin* happened to be on the prowl, and at her nearest routine point, it would take her ten months to reach Gombar at maximum velocity. If she had returned to port, temporarily replaced by an older and slower vessel, the delay might last two years.

Two years was two years too long. Ten months was too long. He could not wait ten weeks. In fact it was highly probable that he hadn't got ten days. Oh, time, time, how impossible it is to stretch it for a man or compress it for a ship.

The warder reappeared, shoved a book between the bars. "Here you are. You have learned enough to understand it."

"Thanks."

Lying full length on the bench he read right through it swiftly but comprehensively. Some pages he skipped after brief perusal because they described games too short, simple and childish to be worth considering. He was not surprised to find several games that were alien variations of ones well-known upon Terra. The Gombarians had playing cards, for instance, eighty to a pack with ten suits.

Alizik proved to be a bigger and more complicated version of chess with four hundred squares and forty pieces per side. This was the one that

somebody had dragged out for sixteen days and it was the only one in the book that seemed capable of such extension. For a while he pondered *alizik*, wondering whether the authorities—and the video audience—would tolerate play at the rate of one move in ten hours. He doubted it. Anyway, he could not prevent his skilled opponent from making each answering move in five seconds.

Yes, that was what he really wanted: a game that slowed down the other fellow despite his efforts to speed up. A game that was obviously a game and not a gag because any fool could see with half an eye that it was possible to finish it once and for all. Yet a game that the other fellow could not finish, win or lose, no matter how hard he tried.

There wasn't any such game on the three worlds of Gombar or the hundred worlds of Terra or the multi-million worlds yet unfound. There couldn't be because, if there were, nobody would play it. People like results. Nobody is sufficiently cracked to waste time, thought and patience riding a hobbyhorse that got nowhere, indulging a rigmarole that cannot be terminated to the satisfaction of all concerned including kibitzers.

But nobody!

No?

"When the last move is made God's Plan will be fulfilled; on that day and at that hour and at that moment the universe will vanish in a mighty thunderclap."

He got off the bench, his cold eyes

expressionless, and began to pace his cell like a restless tiger.

The official had an enormous pot belly, small, piggy eyes and an unctuous smile that remained permanently fixed. His manner was that of a circus ringmaster about to introduce his best act.

"Ah," he said, noting the book, "so you have been studying our games, eh?"

"Yes."

"I hope you've found none of them suitable."

"Do you?" Taylor surveyed him quizzically. "Why?"

"It would be a welcome change to witness a contest based on something right out of this world. A genuinely new game would give a lot of satisfaction to everybody. Providing, of course," he added hurriedly, "that it was easy to understand and that you didn't win it too quickly."

"Well," said Taylor, "I must admit I'd rather handle something I know than something I don't."

"Good, good!" enthused the other. "You prefer to play a Terran game?"

"That's right."

"There are limitations on your choice."

"What are they?" asked Taylor.

"Once we had a condemned murderer who wanted to oppose his games-partner in seeing who could be the first to catch a sunbeam and put it in a bottle. It was nonsensical. You must choose something that obviously and beyond argument can be accomplished."

"I see."

"Secondly, you may not select something involving the use of intricate and expensive apparatus that will take us a long time to manufacture. If apparatus is needed, it must be cheap and easy to construct."

"Is that all?"

"Yes—except that the complete rules of the game must be inscribed by you unambiguously and in clear writing. Once play begins those rules will be strictly followed and no variation of them will be permitted."

"And who approves my choice after I've described it?"

"I do."

"All right. Here's what I'd like to play." Taylor explained it in detail, borrowed pen and paper and made a rough sketch. When he had finished the other folded the drawing and put it in a pocket.

"A strange game," admitted the official, "but it seems to me disappointingly uncomplicated. Do you really think you can make the contest last a full day?"

"I hope so."

"Even two days perhaps?"

"With luck."

"You'll need it!" He was silent with thought a while, then shook his head doubtfully. "It's a pity you didn't think up something like a better and trickier version of *alizik*. The audience would have enjoyed it and you might have gained yourself a longer lease of life. Everyone would get a great kick out of it if you beat the record for delay before your execution."

"Would they really?"

"They sort of expect something extra-special from an alien life form."

"They're getting it, aren't they?"

"Yes, I suppose so." He still seemed vaguely dissatisfied. "Oh, well, it's your life and your struggle to keep it a bit longer."

"I'll have only myself to blame when the end comes."

"True. Play will commence promptly at midday tomorrow. After that it's up to you."

He lumbered away, his heavy footsteps dying along the corridor. A few minutes later the warder appeared.

"What did you pick?"

"Arky-malarkey."

"Huh? What's that?"

"A Terran game."

"That's fine, real fine." He rubbed appreciative hands together. "He approved it, I suppose?"

"Yes, he did."

"So you're all set to justify your continued existence. You'll have to take care to avoid the trap."

"What trap?" Taylor asked.

"Your partner will play to win as quickly and conclusively as possible. That is expected of him. But once he gets it into his head that he can't win he'll start playing to lose. You've no way of telling exactly when he'll change his tactics. Many a one has been caught out by the sudden switch and found the game finished before he had time to realize it."

"But he must keep to the rules, mustn't he?"

"Certainly. Neither you nor he will be allowed to ignore them. Other-

wise the game would become a farce."

"That suits me."

Somewhere outside sounded a high screech like that of a bobcat backing into a cactus. It was followed by a scuffle of feet, a dull thud and dragging noises. A distant door creaked open and banged shut.

"What goes?" said Taylor.

"Lagartine's game must have ended."

"Who's Lagartine?"

"A political assassin." The warder glanced at his watch. "He chose *ram-sid*, a card game. It has lasted a mere four hours. Serves him right. Good riddance to bad rubbish."

"And now they're giving him the big squeeze?"

"Of course." Eying him, the warder said, "Nervous?"

"Ha-ha," said Taylor without mirth.

The performance did not commence in his cell as he had expected. A contest involving an alien life form playing an alien game was too big an event for that. They took him through the prison corridors to a large room in which stood a table with three chairs. Six more chairs formed a line against the wall, each occupied by a uniformed plug-ugly complete with hand gun. This was the knock-down-and-drag-out squad ready for action the moment the game terminated.

At one end stood a big, black cabinet with two rectangular portholes through which gleamed a pair of lenses. From it came faint ticking

sounds and muffled voices. This presumably contained the video camera.

Taking a chair at the table, Taylor sat down and gave the armed audience a frozen stare. A thin-faced individual with the beady eyes of a rat took the chair opposite. The potbellied official dumped himself in the remaining seat. Taylor and Rat-eyes weighed each other up, the former with cold assurance, the latter with sadistic speculation.

Upon the table stood a board from which arose three long wooden pegs. The left-hand peg held a column of sixty-four disks evenly graduated in diameter, the largest at the bottom, smallest at the top. The effect was that of a tapering tower built from a nursery do-it-yourself kit.

Wasting no time, Pot-belly said, "This is the Terran game of Arky-malarkey. The column of disks must be transferred from the peg on which it sits to either of the other two pegs. They must remain graduated in the same order, smallest at the top, biggest at the bottom. The player whose move completes the stack is the winner. Do you both understand?"

"Yes," said Taylor.

Rat-eyes assented with a grunt.

"There are three rules," continued Potbelly, "which will be strictly observed. You will make your moves alternately, turn and turn about. You may move only one disk at a time. You may not place a disk upon any other smaller than itself. Do you both understand?"

"Yes," said Taylor.

Rat-eyes gave another grunt.

From his pocket Potbelly took a tiny white ball and carelessly tossed it onto the table. It bounced a couple of times, rolled across and fell off on Rat-eyes' side.

"You start," he said.

Without hesitation Rat-eyes took the smallest disk from the top of the first peg and placed it on the third.

"Bad move," thought Taylor, blank of face. He shifted the second smallest disk from the first peg to the second.

Smirking for no obvious reason, Rat-eyes now removed the smallest disk from the third peg, placed it on top of Taylor's disk on the second. Taylor promptly switched another disk from the pile on the first peg to the empty third peg.

After an hour of this it had become plain to Rat-eyes that the first peg was not there merely to hold the stock. It had to be used. The smirk faded from his face, was replaced by mounting annoyance as hours crawled by and the situation became progressively more complicated.

By bedtime they were still at it, swapping disks around like crazy, and neither had got very far. Rat-eyes now hated the sight of the first peg, especially when he was forced to put a disk back on it instead of taking one off it. Potbelly, still wearing his fixed, meaningless smile, announced that play would cease until sunrise tomorrow.

The next day provided a long, arduous session lasting from dawn

to dark and broken only by two meals. Both players worked fast and hard, setting the pace for each other and seeming to vie with one another in effort to reach a swift conclusion. No onlooker could find cause to complain about the slowness of the game. Four times Rat-eyes mistakenly tried to place a disk on top of a smaller one and was promptly called to order by the referee in the obese shape of Potbelly.

A third, fourth, fifth and sixth day went by. Rat-eyes now played with a mixture of dark suspicion and desperation while the column on the first peg appeared to go up as often as it went down. Though afflicted by his emotions he was no fool. He knew quite well that they were making progress in the task of transferring the column. But it was progress at an appalling rate. What's more, it became worse as time went on. Finally, he could see no way of losing the game, much less winning it.

By the fourteenth day Rat-eyes had reduced himself to an automaton wearily moving disks to and fro in the soulless, disinterested manner of one compelled to perform a horrid chore. Taylor remained as impassive as a bronze Buddha and that fact didn't please Rat-eyes either.

Danger neared on the sixteenth day though Taylor did not know it. The moment he entered the room he sensed an atmosphere of heightened interest and excitement. Rat-eyes looked extra glum. Potbelly had taken on added importance. Even the stolid, dull-witted guards displayed faint

signs of mental animation. Four off-duty warders joined the audience. There was more activity than usual within the video cabinet.

Ignoring all this, Taylor took his seat and play continued. This endless moving of disks from peg to peg was a lousy way to waste one's life but the strangling-post was lousier. He had every inducement to carry on. Naturally he did so, shifting a disk when his turn came and watching his opponent with his pale gray eyes.

In the midafternoon Rat-eyes suddenly left the table, went to the wall, kicked it good and hard and shouted a remark about the amazing similarity between Terrans and farmyard manure. Then he returned and made his next move. There was some stirring within the video cabinet. Potbelly mildly reproved him for taking time off to advertise his patriotism. Rat-eyes went on playing with the surly air of a delinquent whose mother has forgotten to kiss him.

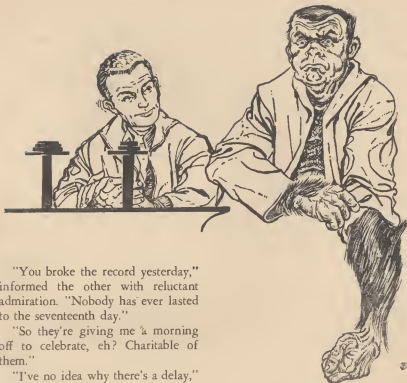
Late in the evening, Potbelly stopped the game, faced the video lenses and said in portentous manner, "Play will resume tomorrow—the seventeenth day!"

He voiced it as though it meant something or other.

When the warder shoved his breakfast through the grille in the morning, Taylor said, "Late, aren't you? I should be at play by now."

"They say you won't be wanted before this afternoon."

"That so? What's all the fuss about?"



"You broke the record yesterday," informed the other with reluctant admiration. "Nobody has ever lasted to the seventeenth day."

"So they're giving me a morning off to celebrate, eh? Charitable of them."

"I've no idea why there's a delay," said the warder. "I've never known them to interrupt a game before."

"You think they'll stop it altogether?" Taylor asked, feeling a constriction around his neck. "You think they'll officially declare it finished?"

"Oh, no, they couldn't do that." He looked horrified at the thought of it. "We mustn't bring the curse of the dead upon us. It's absolutely essential that condemned people should be made to choose their own time of execution."

"Why is it?"

"Because it always has been since the start of time."

He wandered off to deliver other breakfasts, leaving Taylor to stew the explanation. "Because it always has been." It wasn't a bad reason. Indeed, some would consider it a good one. He could think of several pointless, illogical things done on Terra solely because they always had been done. In this matter of unchallenged habit the Gombarians were no better or worse than his own kind.

Though a little soothed by the warder's remarks he couldn't help feeling more and more uneasy as the

morning wore on without anything happening. After sixteen days of moving disks from peg to peg it had got so that he was doing it in his sleep. Didn't seem right that he should be enjoying a spell of aimless loafing around his cell. There was something ominous about it.

Again and again he found himself nursing the strong suspicion that officialdom was seeking an effective way of ending the play without appearing to flout convention. When they found it—if they found it—they'd pull a fast one on him, declare the game finished, take him away and fix him up with a very tight necktie.

He was still wallowing in pessimism when the call came in the afternoon. They hustled him along to the same room as before. Play was resumed as if it had never been interrupted. It lasted a mere thirty minutes. Somebody tapped twice on the inside of the video cabinet and Potbelly responded by calling a halt. Taylor went back to his cell and sat there baffled.

Late in the evening he was summoned again. He went with bad grace because these short and sudden performances were more wearing on the nerves than continual day-long ones. Previously he had known for certain that he was being taken to play Arky-malarkey with Rat-eyes. Now he could never be sure that he was not about to become the lead character in a literally breathless scene.

On entering the room he realized

at once that things were going to be different this time. The board with its pegs and disks still stood in the center of the table. But Rat-eyes was absent and so was the armed squad. Three people awaited him: Potbelly, Palamin, and a squat, heavily built character who had the peculiar air of being of this world but not with it.

Potbelly was wearing the offended frown of someone burdened with a load of stock in a nonexistent oil well. Palamin looked singularly displeased and expressed it by snorting like an impatient horse. The third appeared to be contemplating a phenomenon on the other side of the galaxy.

"Sit," ordered Palamin, spitting it out.

Taylor sat.

"Now, Marnikot, you tell him."

The squat one showed belated awareness of being on Gombar, said pedantically to Taylor, "I rarely look at the video. It is suitable only for the masses with nothing better to do."

"Get to the point," urged Palamin.

"But having heard that you were about to break an ages-old record," continued Marnikot, undisturbed, "I watched the video last night." He made a brief gesture to show that he could identify a foul smell at first sniff. "It was immediately obvious to me that to finish your game would require a minimum number of moves of the order of two to the sixty-fourth power minus one." He took flight into momentary dreamland, came back and added mildly, "That is a large number."

"Large!" said Palamin. He let go a snort that rocked the pegs.

"Let us suppose," Marnikot went on, "that you were to transfer these disks one at a time as fast as you could go, morning, noon and night without pause for meals or sleep, do you know how long it would take to complete the game?"

"Nearly six billion Terran centuries," said Taylor as if talking about next Thursday week.

"I have no knowledge of Terran time-terms. But I can tell you that neither you nor a thousand generations of your successors could live long enough to see the end of it. Correct?"

"Correct," Taylor admitted.

"Yet you say that this is a Terran game?"

"I do."

Marnikot spread hands helplessly to show that as far as he was concerned there was nothing more to be said.

Wearing a forbidding scowl, Palamin now took over. "A game cannot be defined as a genuine one unless it is actually played. Do you claim that this so-called game really is played on Terra?"

"Yes."

"By whom?"

"By priests in the Temple of Benares."

"And how long have they been playing it?" he asked.

"About two thousand years."

"Generation after generation?"

"That's right."

"Each player contributing to the

end of his days without hope of seeing the result?"

"Yes."

Palamin fumed a bit. "Then *why* do they play it?"

"It's part of their religious faith. They believe that the moment the last disk is placed the entire universe will go bang."

"Are they crazy?"

"No more so than people who have played *alizik* for equally as long and to just as little purpose."

"We have played *alizik* as a series of separate games and not as one never-ending game. A rigmarole without possible end cannot be called a game by any stretch of the imagination."

"Arky-malarkey is not endless. It has a conclusive finish." Taylor appealed to Marnikot as the indisputed authority. "Hasn't it?"

"It is definitely finite," pronounced Marnikot, unable to deny the fact.

"So!" exclaimed Palamin, going a note higher. "You think you are very clever, don't you?"

"I get by," said Taylor, seriously doubting it.

"But we are cleverer," insisted Palamin, using his nastiest manner. "You have tricked us and now we shall trick you. The game is finite. It can be concluded. Therefore it will continue until it reaches its natural end. You will go on playing it days, weeks, months, years until eventually you expire of old age and chronic frustration. There will be times when the very sight of these disks will drive you crazy and you will beg for merci-

ful death. But we shall not grant that favor—and you will continue to play." He waved a hand in triumphant dismissal. "Take him away."

Taylor returned to his cell.

When supper came the warden offered, "I am told that play will go on regularly as from tomorrow morning. I don't understand why they messed it up today."

"They've decided that I'm to suffer a fate worse than death," Taylor informed.

The warden stared at him.

"I have been very naughty," said Taylor.

Rat-eyes evidently had been advised of the new setup because he donned the armor of philosophical acceptance and played steadily but without interest. All the same, long sessions of repetitive motions ate corrosively into the armor and gradually found its way through.

In the early afternoon of the fifty-second day Rat-eyes found himself faced with the prospect of returning most of the disks to the first peg, one by one. He took off the clompers he used for boots. Then he ran barefooted four times around the room, bleating like a sheep. Potbelly got a crick in the neck watching him. Two guards led Rat-eyes away still bleating. They forgot to take his clompers with them.

By the table Taylor sat gazing at the disks while he strove to suppress his inward alarm. What would happen now? If Rat-eyes had given up for keeps it could be argued that he

had lost, the game had concluded and the time had come to play okey-chokey with a piece of cord. It could be said with equal truth that an unfinished game remains an unfinished game even though one of the players is in a mental home giving his hair a molasses shampoo.

If the authorities took the former view his only defense was to assert the latter one. He'd have to maintain with all the energy at his command that since he had not won or lost his time could not possibly have come. It wouldn't be easy if he had to make his protest while being dragged by the heels to his doom. His chief hope lay in Gombarian unwillingness to outrage an ancient convention. Millions of video viewers would take a poor look at officialdom mauling a pet superstition. Yes, man, there were times when the Idiot's Lantern had its uses.

He need not have worried. Having decided that to keep the game going would be a highly refined form of hell, the Gombarians had already prepared a roster of relief players drawn from the ranks of minor offenders whose ambitions never rose high enough to earn a strangling. So after a short time another opponent appeared.

The newcomer was a shifty character with a long face and hanging dewlaps. He resembled an especially doxy bloodhound and looked barely capable of articulating three words, to wit, "Ain't talking, copper." It must have taken at least a month to teach him that he must move only one disk

at a time and never, never, never place it upon a smaller one. But somehow he had learned. The game went on.

Dopey lasted a week. He played slowly and doggedly as if in fear of punishment for making a mistake. Often he was irritated by the video cabinet which emitted ticking noises at brief but regular intervals. These sounds indicated the short times they were on the air.

For reasons best known to himself Dopey detested having his face broadcasted all over the planet and near the end of the seventh day he'd had enough. Without warning he left his seat, faced the cabinet and made a number of swift and peculiar gestures at the lenses. The signs meant nothing to the onlooking Taylor. But Potbelly almost fell off his chair. The guards sprang forward, grabbed Dopey and frogmarched him through the door.

He was replaced by a huge-jowled, truculent character who dumped himself into the chair, glared at Taylor and wiggled his hairy ears. Taylor, who regarded this feat as one of his own accomplishments, promptly wiggled his own ears back. The other then looked fit to burst a blood vessel.

"This Terran sneak," he roared at Potbelly, "is throwing dirt at me. Do I *have* to put up with that?"

"You will cease to throw dirt," ordered Potbelly.

"I only wiggled my ears," said Taylor.

"That is the same thing as throw-

ing dirt," Potbelly said mysteriously. "You will refrain from doing it and you will concentrate upon the game."

And so it went on with disks being moved from peg to peg hour after hour, day after day, while a steady parade of opponents arrived and departed. Around the two hundredth day Potbelly himself started to pull his chair apart with the apparent intention of building a camp fire in the middle of the floor. The guards led him out. A new referee appeared. He had an even bigger paunch and Taylor promptly named him Potbelly Two.

How Taylor himself stood the soul-deadening pace he never knew. But he kept going while the others cracked. He was playing for a big stake while they were not. All the same, there were times when he awoke from horrid dreams in which he was sinking through the black depths of an alien sea with a monster disk like a millstone around his neck. He lost count of the days and once in a while his hands developed the shakes. The strain was not made any easier by several nighttime uproars that took place during this time. He asked the warder about one of them.

"Yasko refused to go. They had to beat him into submission."

"His game had ended?"

"Yes. The stupid fool matched a five of anchors with a five of stars. Immediately he realized what he'd done he tried to kill his opponent." He wagged his head in sorrowful reproof. "Such behavior never does them any good. They go to the post

cut and bruised. And if the guards are angry with them they ask the executioner to twist slowly."

"Ugh!" Taylor didn't like to think of it. "Surprises me that none have chosen my game. Everybody must know of it by now."

"They are not permitted to," said the warder. "There is now a law that only a recognized Gombarian game may be selected."

He ambled away. Taylor lay full length on his bench and hoped for a silent, undisturbed night. What was the Earth-date? How long had he been here? How much longer would he remain? How soon would he lose control of himself and go nuts? What would they do with him if and when he became too crazy to play?

Often in the thought-period preceding sleep he concocted wild plans of escape. None of them were of any use whatever. Conceivably he could break out of this prison despite its grilles, armored doors, locks, bolts, bars and armed guards. It was a matter of waiting for a rare opportunity and seizing it with both hands. But suppose he got out, what then? Any place on the planet he would be as conspicuous as a kangaroo on the sidewalks of New York. If it were possible to look remotely like a Gombarian, he'd have a slight chance. It was not possible. He could do nothing save play for time.

This he continued to do. On and on and on without cease except for meals and sleep. By the three-hundredth day he had to admit to himself that he was feeling somewhat

moth-eaten. By the four-hundredth he was under the delusion that he had been playing for at least five years and was doomed to play forever, come what may. The four-twentieth day was no different from the rest except in one respect of which he was completely unaware—it was the last.

At dawn of day four twenty-one no call came for him to play. Perforce he waited a couple of hours and still no summons. Maybe they'd decided to break him with a cat-and-mouse technique, calling him when he didn't expect it and not calling him when he did. A sort of psychological water torture. When the warder passed along the corridor Taylor went to the bars and questioned him. The fellow knew nothing and was as puzzled as himself.

The midday meal arrived. Taylor had just finished it when the squad of guards arrived accompanied by an officer. They entered the cell and removed his irons. Ye gods, this was something! He stretched his limbs luxuriously, fired questions at the officer and his plug-uglies. They took no notice, behaved as if he had stolen the green eye of the little yellow god. Then they marched him out of the cell, along the corridors and past the games room.

Finally they passed through a large doorway and into an open yard. In the middle of this area stood six short steel posts each with a hole near its top and a coarse kneeling-mat at its base. Stolidly the squad tramped

straight towards the posts. Taylor's stomach turned over. The squad pounded on past the posts and toward a pair of gates. Taylor's stomach turned thankfully back and settled itself.

Outside the gates they climbed aboard a troop-carrier which at once drove off. It took him around the outskirts of the city to a spaceport. They all piled out, marched past the control tower and onto the concrete. There they halted.

Across the spaceport, about half a mile away, Taylor could see a Terran vessel sitting on its fins. It was far too small for a warship, too short and fat for a scoutship. After staring at it with incredulous delight he decided that it was a battleship's lifeboat. He wanted to do a wild dance and yell silly things. He wanted to run like mad towards it but the guards stood close around and would not let him move.

They waited there for four long, tedious hours at the end of which another lifeboat screamed down from the sky and landed alongside its fellow. A bunch of figures came out of it, mostly Gombarians. The guards urged him forward.

He was dimly conscious of some sort of exchange ceremony at the half-way mark. A line of surly Gombarians passed him, going the opposite way. Many of them were ornamented with plenty of brass and had the angry faces of colonels come fresh from a general demotion. He recognized

one civilian, Borkor, and wiggled his ears at him as he went by.

Then willing hands helped him through an air lock and he found himself sitting in the cabin of a ship going up. A young and eager lieutenant was talking to him but he heard only half of it.

"... Landed, snatched twenty and beat it into space. We cross-examined them by signs ... bit surprised to learn you were still alive ... released one with an offer to exchange prisoners. Nineteen Gombarian bums for one Terran is a fair swap, isn't it?"

"Yes," said Taylor, looking around and absorbing every mark upon the walls.

"We'll have you aboard the *Thunderer* pretty soon ... *Macklin* couldn't make it with that trouble near Cygni ... got here as soon as we could." The lieutenant eyed him sympathetically. "You'll be heading for home within a few hours. Hungry?"

"No, not at all. The one thing they didn't do was starve me."

"Like a drink?"

"Thanks, I don't drink."

Fidgeting around embarrassedly, the lieutenant asked, "Well, how about a nice, quiet game of draughts?"

Taylor ran a finger around the inside of his collar and said, "Sorry, I don't know how to play and don't want to learn. I am allergic to games."

"You'll change."

"I'll be hanged if I do," said Taylor.

THE END

THE SIEVE



BY CHRISTOPHER ANVIL

Man has evolved on the planet Earth—and those who were unsuitable to this planet died along the way. But a new planet, now....

Illustrated by Martinez



BENTON squinted narrowly at the green leaf Dave Ander was experimentally rolling in his hand.

"I don't know, Dave," said Benton. "Maybe it's none of my business. Still—" He looked around at the trees, some of them six feet through

the butt, that surrounded the clearing. The carcass of the dead roller was still sprawled over a heap of fallen logs at the edge of the clearing. The wrecked dozer was still upside down, and was already rusting where the roller's claws had ripped off the protective coating. Benton took a deep breath. "All the same,

we've got to get going again. Summer won't last forever."

Ander broke up several more pieces of dried gray leaf, then tipped his hand to let the small pieces sift out onto the green leaf. He rolled the leaf up again, bound it carefully with the pliable stalk of a small vine, then tied it and broke off the rest of the vine. He turned it this way and that.

"Ah," he said.

"Dave," said Benton, "are you going to smoke the thing now?"

"Why not?" Ander felt through his pockets and came out with a pack of matches. He struck one.

"Dave—" said Benton. He hesitated, and again looked over the clearing. Of the row of cabins, only the "Administrative Center" was undamaged. And on the porch of the Administrative Center sat four men and three women, their backs against the wall. Their legs were outstretched, and their heads tilted back. A wisp of white smoke drifted out away from them toward the south.

Ander touched the match to the gray flecks protruding from his rolled leaf. The match blew out. Ander swore, and hastily struck another. Eagerly he sucked on the leaf.

"Dave," said Benton. "For the love of Heaven. Look. It doesn't do any *good*. Nothing's *changed*. When you get through with that, where are you? You're no better off than when you started."

"Ah-h-h," said Ander. His eyes closed and opened again dreamily. He sat down on the ground, sucked

hard, blew out a cloud of white smoke, then lay back in the earth that had been plowed and was already growing up again in weeds.

Benton looked down at Ander for a moment, looked at the four men and three women leaning against the Administrative Center. He looked at the dead and slowly decomposing roller, whose stench, once the wind shifted, would be carried this way to make the place practically uninhabitable. He glanced at the burned earth where the supply rocket had landed tools, medical supplies, and seed, and to which it would not return until next spring. He looked again at Ander, lying comfortably in the sun and rolling his head from side to side as he blew out white smoke. Ander's face wore a look of complete contentment.

Benton looked at Ander's face, looked at the weeds and ruins, and found no words suitable to express his feelings. He turned on his heel and started back toward the cabins.

The sun, sliding down toward the west, was hot on Benton's back and shoulders as he crossed the furrows. His shirt clung to his skin. He was thirsty. He felt slightly light-headed from hunger. He was aware that his mind was functioning with the same degree of efficiency as a dismayed sailing vessel.

He passed a log cabin with the roof smashed in, the chimney knocked full length on the ground, and the logs at one corner mashed down like a child's toy under an adult's

foot. On the half-ruined porch of this cabin sat a girl. The girl had blond hair and high cheekbones. Her head was tilted back, and her shirt open at the throat to show smooth white skin.

Benton stopped. "Dr. Forbes?"

The girl blew twin jets of white smoke out her nostrils. She tilted her head forward and regarded him dreamily. She opened her mouth, and moved her lips soundlessly. After a moment, words came. "Yes, Ben?"

Benton walked over to look down at her. "Ander, Stephenson, Ginetti, Muller, and Greenbaum are all smoking the stuff."

She looked up at him with a faint smile. "Are they, Ben?"

The way she said it made him feel foolish. "Also," he said, "Shirley, Tac, Lou-Ann, and you."

"I see, Ben." She nodded wisely and drew on the rolled leaf. A submerged hint of some other emotion crossed her face. "What about Gina?"

"I haven't seen Gina since the rollers went through."

She smiled faintly. "Have you looked?"

"I've looked all over the place."

"Why, Ben?"

"*Why?*" He stared at her. "A rocketship," he said, "puts down at a spaceport. One of the landing legs collapses. Fourteen injured passengers are carried off. The passenger list shows there were fifteen on board. The spaceport officials search the ship for the last passenger. Why?"

The blond girl shook her head and smiled lazily. She picked up and held out toward him an unsmoked rolled leaf with a few gray flecks protruding from one end. She smiled with her head tilted back. "Sit down, Ben."

"No, thanks," said Ben.

"We might share a dream, Ben."

"Wouldn't that be nice?" he said sourly. "And sooner or later, we'd wake up."

"What of it, Ben?" She patted the rough floor beside her. "Sit."

He didn't move. "Thanks," he growled, "but I'll stand."

She smiled dreamily. "Afraid, Ben?"

He said, "When the rollers came through, were you afraid?"

"I was," she said. "Oh, I was afraid. But I'm not now."

"Aren't you? I'm more afraid now. Exactly what do we do when *winter* comes?"

"Winter?" she said. She frowned as if she could not quite place the word.

"Winter," he said. "This isn't Earth. We can't shove a half-credit in the slot and walk off with dinner on a tray. We've got to have the food *stored*. To store it, we've got to raise it. To raise it, we've got to plant it. To plant it, we've got to work the ground. Nine people sitting around blowing smoke out their noses don't get much *work* done."

She started to giggle, choked, coughed, then held out the rolled leaf. "Ben," she said, "never condemn without knowledge. That was

my mistake. I tried to stop people from using this. I was very righteous, Ben. You see, I only saw it from the *outside*. But then, I experienced it myself. Now I have a much broader viewpoint. I can see it from the inside, too. I'm in a position to judge both sides of the question, Ben, and you're not. You can't judge me so long as you remain lofty and superior—and ignorant—looking at me from without."

"I'm not trying to judge you," said Ben grimly. "I just want to get the dozer fixed, the field plowed, and the seed in. Once we do that, you can smoke the stuff all you want."

At some point while he was talking, the girl began to smile. She giggled, spluttered, and sat shaking silently. "Ben—" she said, her voice soft and low, her head tilted back, her lips parted, and the mass of smoldering poison clenched in her fingers. "Ben, dear, don't be so superior."

Benton turned away, started toward the Administrative Center, took a long look at the row of people on the porch, blowing out smoke and lolling with their heads back, and decided that he would go somewhere else.

He turned around. His gaze took in the wrecked cabins, the dead roller, the overturned dozer, the weeds in the field, and the immense trees of the forest. He thought he saw something move in the deep shadows of the trees. He walked to the second cabin from the Administrative Cen-

ter, ducked under the broken logs, and felt his way around the gloomy interior. On the mantel of his fireplace was a pair of binoculars. He took them down, went outside, studied the forest a minute, then raised the binoculars. At last he made out, in the shadows of the trees, a human figure carrying something that he couldn't quite see, but which appeared long and slender, like a dart gun.

Ben studied this figure for a long while, then swung the glasses slowly right and left and saw nothing moving in the forest. The forest, he told himself, was understandably quiet after the rollers went through. The hunting party wasn't due back yet for another day or two. Gina was missing, true, yet the hunters had taken all the dart guns but one, and that one, Ben knew, was in this cabin right over the fireplace. Therefore, how was it that someone carrying a dart gun was walking through the forest?

Ben got down his own dart gun and stepped outside.

He went around the side of the cabin to the back, crossed a narrow strip of plowed earth, wormed through a barricade of overturned tree stumps, and trotted to the nearest corner of the clearing. He ran along the edge of the clearing, and swung into the forest as he approached the far side, where he had seen the figure moving.

By this time, a cloud of fire gnats had located him. Ben threaded his way through the forest while these

gnats worked him over like so many red-hot knitting needles. By the time Ben spotted the figure moving through the trees ahead of him, he had a number of welts the size of a man's thumbnail. He studied the figure for an instant, noting the green gum smeared on face and hands to keep bugs away, and, held in one hand, the metal pole with short, angled rods at the top.

Ben called out, "Gina?" He kept the gun centered as he walked closer.

The figure stopped and turned to look at him. In a weary voice, the girl said, "Now what?"

Ben lowered the gun. "I saw you from the cabin. The way you were carrying that thing, I took it for a dart gun. I wondered who it was."

"Oh."

Ben waved the cloud of gnats away from his face. "Let's not stand here all day."

They started toward the clearing. Ben said, "What is that thing?"

"The top of the uniwave mast," said Gina. "I had just set it up when the rollers came through. When I dug myself out again, it was gone. I followed their path and finally found it."

He frowned. "When did you leave?"

"I helped get the leaf-smokers out of their ruins first. I guess about an hour after the rollers came through."

"You slept out?"

She laughed. "There's no hotel out there."

"What was it like?"

"Heaven until around midnight,

and purgatory from then on. I was so tired I fell asleep the first soft place I came to. When I woke up, it was cold, damp, and too dark to go anywhere else. But anyway, I had the antenna." She glanced at him. "Has anything happened here?"

He said, "Ander, Tac, Genetti, and Dr. Forbes are on the weed with the rest."

After a moment, the girl took a deep breath and said, "Forbes gave us all those lectures against it, too."

"Well," said Ben, "now she's approached it with real scientific detachment, and she can lecture us from either side."

"How about you?"

"No thanks," said Ben sourly. "I'd like to be alive next spring."

"So would I. But I have my doubts."

"It's simple enough," said Ben angrily. "We've got to have water, food, fuel, and shelter to get through the winter. The supply ship drilled the well while it was here, so that's done. We've got wood all around us, and all we've got to do is cut it up. We've got food to last us till after harvest, but that's all. So either we plant more now or we starve this winter. What could be simpler than that?"

"My brother," said Gina, "is an engineer. He and two friends went to work on New Mars when New Mars was begging for engineers. The three of them were getting triple pay, tax-free, and double for overtime, plus a big bonus if they stayed for thirty-six months. Now, of those

three, two of them stayed the full time and came back with ninety thousand credits; the other one got to drinking a kind of fermented cactus juice, got fired, ended up working as a laborer, drank up his pay, and got killed in a landslide."

They were walking across the fields toward the cabins, and it suddenly occurred to Ben that there might be a tricky situation as he and Gina passed Dr. Forbes' cabin. Already he could see the sun slanting on her blond hair and motionless figure. As Ben was trying to think what to do, Gina went on:

"The two friends that came back said it was a matter of simple logic: The three years would go by no matter what they did. The only question was, where would they be at the end of it?"

"True," said Ben. They were getting closer to the cabins, and he had yet to think of anything.

"They also said that they had gone blank in the face talking simple logic, and it didn't do any good."

"Yes," said Ben.

"And," said Gina, "I'm afraid logic isn't going to help us much here, either."

"Hm-m-m," said Ben. They were almost in front of Dr. Forbes' cabin.

"Well," came the musical voice of the blond girl, the sun shining on her hair, "I see you found her, Ben."

"Yeah," said Ben, moving on.

"Attractive, isn't she, Ben?"

Ben looked at Gina, her face and

hands smeared with thick green gum, her hair matted, and dressed in work clothes that had as much shape as a sack thrown over a post.

Gina glanced at Ben with a look of surprise, then looked back at Dr. Forbes angrily.

Ben wished sincerely that he were somewhere else.

Dr. Forbes said, "He was looking for you, Gina."

"Thanks," said Gina.

Dr. Forbes said, "Oh, she's a fine animal, Ben, no doubt. But will she share your dreams?"

Ben tried to get his feet working, and failed.

Dr. Forbes leaned her head back lazily, and drew on a rolled leaf. The sun, slanting across her tilted head, accentuated the hollow of her cheeks.

"Will you," Ben burst out, "kindly put that thing down for a minute and get something to eat?"

She smiled contentedly. "If you'll smoke it, Ben, I'll stop. We can talk and dream together."

"No, thank you," said Ben.

"Who knows, you might save me, Ben."

"Sure, I can get you out of the quicksand by jumping in with you."

"Ooh," said the blond girl, "you are so righteous, Ben."

Gina bowed her head and walked away without saying anything.

Dr. Forbes shut her eyes and smiled lazily.

Ben turned away angrily, went to his cabin and put the dart gun away. He went back out and found Gina

by the communications shack. With her face smeared with the green gum, Ben couldn't see her expression. She said, in a perfectly ordinary tone, "She never did like me. I don't know why. Maybe because I am a mere technician and she has her doctor's degree."

through the woods. He went out to meet them.

The hunting party consisted of a man named Becket, tall and rangy, and with hard eyes; two men carrying the carcass of a medium-sized animal on a pole slung over their shoulders; three tall girls with grim



"Maybe," said Ben. "I doubt it."

Gina shrugged. "Will you help me fix the antenna?"

"Sure," said Ben.

It took them the rest of the day to get the antenna fixed, and all the following day to straighten out the shambles in the communications shack. The next afternoon, Ben spotted the hunting party coming

expressions; and a grinning man with a piece of grass dangling out of one corner of his mouth, who was called Potter.

Ben looked at their faces and said nothing. Becket glanced around and whistled. "What hit this place?"

"Rollers," said Ben.

"Which?"

Ben pointed. "There's a dead one over there, if you want to look at it.

They put their heads on their tails, and roll like hoops."

Potter said, "You're out of your head, man. You've been smoking too much of that good weed."

Ben said, ignoring Potter, "They rolled out of the forest from the north, mashed down the cabins, flipped the dozer out of their way and disappeared into the forest on this side."

Becket said, "How did you kill it?"

"With a dart gun."

"Where did you aim?"

"The head rests on top of the tail when they're rolling. I shot when the neck was exposed."

Potter said, "It's coming out your ears, man."

Becket said, "Use an enzyme-tipped dart?"

Ben nodded. "Nothing else would even have made them itch."

Potter said, "You boys can blow off the gas, if you want to. It's me for that little old weed." He turned to look over the three girls and said, "Anybody want to come along?"

Two of the three tall girls looked pointedly away from Potter. The third idly shifted her gun so it aimed directly at him. She toyed with the trigger mechanism.

Potter jumped aside. There was a *puff*, and something whined past him.

Potter yelled, "Becket, did you see that? Did you? I got something coming for that!"

Becket turned to look at the girl and said, "Don't waste ammuni-

tion." He glanced back at Ben. "Where is everybody?"

"Smoking the weed."

Becket winced. "All of them?"

"All but Gina."

Becket scowled. "We've *got* to get this place planted."

"Sure," said Ben agreeably.

"Damn it," said Becket, "it's all right to smoke that stuff *if they do their work*. Who's in charge here now?"

"What do you mean?" said Ben. "Muller's conscious. He's colony administrator. He isn't dead, or disabled under the terms of the Code."

Potter said, "Is that little blond doctor on the weed?"

Becket was looking over the weeds flourishing in the field. "This has got to be planted," he said. "Haven't you done anything to get the dozer fixed?"

Ben said grimly, "Maybe I didn't get it across to you. I'll try again."

Potter said, "Why, he's trying to make you look like a fool, Becket."

Ben said, "Excuse me just a minute, Becket." He turned and walked over toward Potter, who raised his gun and said, grinning, "Walk easy, Boy. I might just decide to put a little enzyme in your blood, Boy. How you think you'd like that?"

The girl who had fired the dart toward Potter snapped back the bolt and swung up her gun.

Potter whirled, his own gun coming up.

Ben sprang forward, and struck Potter on the chin. As Potter tried to struggle, Ben jerked the gun away

from him, smashed the butt into his head, and stepped back. Potter collapsed on the ground.

Ben looked at the girl who had raised her gun and distracted Potter. "Thanks."

The girl said, "Is he dead?"

Ben felt Potter's pulse. "No."

"Then," said the girl, "it isn't over yet."

Ben frowned and walked back to Becket. "I was saying," said Ben, "Muller is still in control of his senses. They all are. Are you asking me why I don't *make* them put down the weed, get up, and do what they're supposed to?"

Becket frowned, but didn't answer for a moment.

Ben said, "I know, seeing this mess comes as a shock. I'll do anything I can to straighten it out. You just tell me, though, *what am I going to do?*"

Becket looked around at the half-crushed cabins, and the weeds in the fields. He said, "You can't talk sense with them?"

"Oh, they'll talk sense. They just won't *do* anything."

"Well, why not take the weed away from them?"

"Because they can walk north, south, east, or west, and get more anytime they feel like it. There are nine of them and one of me. Figure it out."

Becket shook his head. "I see what you mean. I'm sorry I jumped on you. But I can tell you one thing. We're going to have to figure something out, and soon." He motioned

to the rest of his party. "Let's go." He walked beside Ben on the way back. As the party split up on approaching the cabins, Ben saw Gina watching him from the door of the communications shack. She cupped her hands and called out:

"The set's working. West Three is on the screen."

The face on the screen was that of a man with a heavy beard, narrowed eyes, and a carefully blank expression. He said roughly, "What do you want?"

Ben stared at him for an instant, then said, "Well, a bunch of rollers went through here several days ago, and knocked out our transmitter—"

"Working now, ain't it?"

"Yes," Ben said, "it is, but—"

"Then what do you want?"

Ben could feel pressure building up, as if his head were about to explode. He leaned forward and said slowly and distinctly, "We would like to *use* it."

The man stared back at him, then his bristly face split into a gap-toothed grin. "New here, are you?"

"We haven't been here a month yet."

"Hm-m-m." The man turned away. They could hear his voice as he asked, "How does their bearing check?"

Another voice said, "It fits with what they say. But they could be a lot closer, using a damp-down on the beam power."

"I don't figure them carrying that much equipment around with them."

The bearded man turned around. "Just landed, eh? Are these 'rollers' you talk about pretty big, tuck their tails under their heads and roll along giving a shove with their feet every now and then?"

"That's it," said Ben.

"Tell me something," said the bearded man. "How do they see so they never hit a tree?"

Ben blinked. "I don't know."

"You wouldn't believe it, but we had a man killed deciding that question. They can see because their eyes stick out on stalks, like a snail's. Whether it's true, I don't know; but that's it we've decided. You want to kind of decide things, so in the middle of winter, when the snow's six feet deep outside, and the wind's been blowing steady for three weeks, you won't have too many unsettled questions laying around."

The possibilities this comment seemed to open up left Ben speechless for a moment. He swallowed and nodded.

"Another thing. How many are there in your party?"

"Eighteen," said Ben. "There were twenty, but two of the women got sick just after we landed, and died."

"Funny," said the bearded man, "the women generally die in the winter. Late winter."

"Oh."

"Well," he said, "how many of these eighteen are boobs?"

Ben leaned toward the screen and cupped his ear. "What? I didn't hear you."

"How many of these eighteen are boobs? You know, jerks, deadheads. Fools."

Ben blinked. "Well—" He thought a moment. "One, maybe."

"Then you're in heaven and don't know it. All right, tell me this. How many of your people are absolutely, one-hundred per cent trustworthy?"

Ben thought a moment. "Maybe eight."

"Then you've got too big a proportion of people you can't trust. Kill the rest."

Ben clenched his hands. "Wait a minute."

The bearded man leaned forward and said earnestly, "You kill them, or they will kill you and themselves both. We aren't on the home planet. You're still on ship rations, so you don't know what you're up against yet. You think you plant your seed and work your crop and harvest your crop and the horn of plenty runs over. You think you'll do your work and get your pay. That isn't how it goes."

"The first year we were here, we felled, cleared, burned, plowed, planted, and raised a fine crop. A little animal no bigger than your hand came out of the forest by the tens of thousands one night, while we were sitting around telling each other what a fine new life we were building here, and these little animals stripped every grain of corn off almost every ear in the field, and we sat there and heard the corn rustle and never knew anything was going on until it dawned on some-

body that there wasn't any wind. Don't plant corn. Plant potatoes."

Ben shut his eyes a minute. "We planned to put in a lot of corn."

"Put in a lot of potatoes instead."

"We don't have that many."

The bearded man shrugged. "Tough. Leave word with the supply ship next time it comes."

Ben turned aside and glanced at Gina for a moment. In that moment, Ben saw Gina as sturdy, sound, and hard-working. This moment passed in a flash; when it was gone, Ben was left with the solid impression that he could *rely* on Gina. A part of Ben's mind that had clung with concern to Dr. Forbes let go for that moment, much as Ben would have let go of a clump of poison ivy.

The bearded man was looking at him. "We didn't do it right," he said. "We did it slow and messy. We had a woman liked to make men jealous of each other, Took us almost a year to get rid of her. It's a plain miracle we didn't all kill each other off first. Then we had a man wouldn't pull his own weight. We lugged *him* along for a year-and-a-half. He had an accident through sheer carelessness, and then it was up to us to give him a blood transfusion. We had the equipment. But we didn't do it. We needed the blood ourselves. That wasn't all, either. We even had one that figured he'd be king and we'd work for him. He had a talent for it, I'll admit that. It took us three weeks to evolve

through that mess, and when the end came, we had a grand finale that wakes me up with the shakes even yet."

He looked at Ben shrewdly. "You see what I mean, boy. Don't go through all that. Do it fast. Do it neat. And don't put it off either. I've thought this over a lot, now that it's too late for us to do it. I think the thing to do is to get the lot of them drunk some night, and add a little something to the liquor. Or, you could set up a night guard that incidentally looks in on everybody, now and then as they sleep. Naturally, none of *them* is going to volunteer for night guard. When they get used to the routine, they won't even wake up when you look in. Then some dark night, bash their brains in while they sleep. Or—"

He went on this way detailing with relish plan after plan, while Ben's thoughts grew numb and his brain froze over. Ben heard someone move behind him, and glanced around.

Becket was staring open-mouthed looking at the screen. He tore his gaze away and looked at Ben.

"Potter's smoking the weed," he said. "With Dr. Forbes."

Ben shook his head wearily.

Becket said, "I see what you mean about their being logical. She almost convinced me she was sane and I am crazy."

Ben nodded, and started to turn away.

Becket cleared his throat unhappily. He said, "She said to tell you—if

you don't come to see her soon, she'll make her dream with Potter."

Ben shut his eyes and stood perfectly still.

"She said," Becket went on unhappily, "that in her dream, she can call him Ben, and never know the difference."

Something seemed to rise up inside of Ben, and hammer to be let loose. When it died away, he heard himself say, in a voice that sounded calm, "Well, I can't stop her."

"She's going to kill herself with that weed," said Becket miserably. "She's skin and bones."

"All she's got to do is put the weed down, open some concentrate, and work her jaws."

"But, Ben—" cried Becket.

Ben glanced around and saw that Gina was crying. For some reason, this made him mad. "Listen," he said to Becket, "when she started on that stuff it turned me inside out. The way she talked and acted, I could see the whole sequence of events stretched out into the future. We aren't at the end yet. You and I are going to suffer the agonies of hell while she floats around in dreamland. It's going to take *time*."

"But *she* won't suffer," said Ben angrily. "You tell me. You've looked at her face. Is she in any pain?"

Becket drew a deep shuddering breath. "No," he said finally. "But we've got to *do* something!"

"You're perfectly free to think on it," said Ben. "If you think of any

way we can nurse ten grown-up babies through spring, summer, fall, and winter and still have time to do the work we've got to do, you let me know."

From Becket's expression, it was plain that he was thinking hard.

Ben glanced at the screen and saw that the bearded man was watching with a puzzled intentness. "Well," he said, and nodded his head wisely, "it sounds like you have your troubles. But there'll be more. And you're too far away to count on anyone but yourself. You just remember what I—" He stopped and said, in a different tone of voice, "But you won't. It isn't human nature."

"No," said Ben wearily. "We won't. But then, we won't *have* to."

When the supply rocket landed next spring, the crew found eight healthy men and women, three babies, and on the edge of the clearing, ten neat graves with flowers growing around them.

As the ship lifted after unloading its supplies, one of the crewmen turned and said to another. "It seldom fails. You come back after the first winter, and there's only half the people left. It's like a sieve. Some get through, and some don't. But what happens?"

"Who knows? They don't talk about it much. All I know is, *I* don't want to be a pioneer."

"No, nor me either."

They shook hands on it. Fervently.

THE END

THE.

•
•
•



•
•
•

CATCH

BY

GORDON R. DICKSON

Illustrated by Martinez

THE CATCH

It is the inevitable tendency of a born sucker to be a sucker, and to work hard at becoming a sucker. And if nobody wants to make a sucker out of him, he'll fix it that way anyhow. Like human beings, for instance....



URE, Mike. Gee!" said the young Tolfian excitedly, and went dashing off from the spaceship in the direction of the temporary camp his local people had set up at a distance of some three hundred yards across the grassy turf of the little valley. Watching him go, Mike Wellsbauer had to admit that in motion he made a pretty sight, scooting along on his hind legs, his sleek black-haired otterlike body leaning into the wind of his passage, and his wide, rather paddle-shaped tail extended behind him to balance the weight of his erected body. All the same . . .

"I don't like it," Mike murmured. "I don't like it one bit."

"First signs of insanity," said a female and very human voice behind him. He turned about.

"All right, Penny," he said. "You can laugh. But this could turn out to be the most unfunny thing that ever happened to the human race. Where is the rest of the crew?"

Peony Matsu sobered, the small

gamin grin fading from her pert face, as she gazed up at him.

"Red and Tommy are still trying to make communication contact with home base," she said. "Alvin's out checking the flora—he can't be far." She stared at him curiously. "What's up now?"

"I want to know what they're building."

"Something for us, I'll bet."

"That's what I'm afraid of. I've just sent for the local squire." Mike peered at the alien camp. Workers were still zipping around it in that typical Tolfian fashion that seemed to dictate that nobody went anywhere except at a run. "This time he's going to give me a straight answer."

"I thought," said Penny, "he had."

"Answers," said Mike, shortly. "Not necessarily straight ones." He heaved a sudden sigh, half of exhaustion, half of exasperation. "That young squirt was talking to me right now in English. In *English!* What can you do?"

Penny bubbled with laughter in spite of herself.

"All right, now hold it!" snapped Mike, glaring at her. "I tell you that whatever this situation is, it's serious. And letting ourselves be conned into making a picnic out of it may be just what they want."

"All right," said Penny, patting him on the arm. "I'm serious. But I don't see that their learning English is any worse than the other parts of it—"

"It's the whole picture," growled Mike, not waiting for her to finish. He stumped about to stand half-turned away from her, facing the Tolfian camp, and she gazed at his short, blocky, red-haired figure with tolerance and a scarce-hidden affection. "The first intelligent race we ever met. They've got science we can't hope to touch for nobody knows how long, they belong to some Interstellar Confederation or other with races as advanced as themselves—and they fall all over themselves learning English and doing every little thing we ask for. *'Sure, Mike!'*—that's what he said to me just now . . . *'Sure, Mike!'* I tell you, Penny—"

"Here they come now," she said.

A small procession was emerging from the camp. It approached the spaceship at a run, single file, the tallest Tolfian figure in the lead, and the others grading down in size behind until the last was a half-grown alien that was pretty sure to be the one Mike had sent on the errand.

"If we could just get through to

home base back on Altair A—" muttered Mike; and then he could mutter no more, because the approaching file was already dashing into hearing distance. The lead Tolfian raced to the very feet of Mike and sat down on his tail. His muzzle was gray with age and authority and the years its color represented had made him almost as tall as Mike.

"Mike!" he said, happily.

The other Tolfians had dispersed themselves in a semicircle and were also sitting on their tails and looking rather like a group of racetrack fans on shooting sticks.

"Hello, Morah," said Mike, in a pleasantly casual tone. "What're you building over there now?"

"A terminal—a transport terminal, I suppose you'd call it in English, Mike," said Morah. "It'll be finished in a few hours. Then you can all go to Barzalac."

"Oh, we can, can we?" said Mike. "And where is Barzalac?"

"I don't know if you know the sun, Mike," said Morah, seriously. "We call it Aimna. It's about a hundred and thirty light-years from ours. Barzalac is the Confederation center—on its sixth planet."

"A hundred and thirty light-years?" said Mike, staring at the Tolfian.

"Isn't that right?" said Morah, confusedly. "Maybe I've got your terms wrong. I haven't been speaking your language since yesterday—"

"You speak it just fine. Just fine," said Mike. "Nice of you all to go to the trouble to learn it."

"Oh, it wasn't any trouble," said Morah. "And for you humans—well," he smiled, "nothing's too good, you know."

He said the last words rather shyly, and ducked his head for a second as if to avoid Mike's eyes.

"That's very nice," said Mike. "Now, would you mind if I asked you again *why* nothing's too good?"

"Oh, didn't I make myself clear before?" said Morah, in distressed tones. "I'm sorry—the thing is, we've met others of your people before."

"I got that, all right," said Mike. "Another race of humans, some thousands or dozens of thousands of years ago. And they aren't around any more?"

"I am very sorry," said Morah, with tears in his eyes. "Very, very sorry—"

"They died off?"

"Our loss—the loss of all the Confederation—was deeply felt. It was like losing our own, and more than our own."

"Yes," said Mike. He locked his hands behind his back and took a step up and down on the springy turf before turning back to the Tolfian squire. "Well, now, Morah, we wouldn't want that to happen to us."

"Oh, no!" cried Morah. "It musn't happen. Somehow—we must insure its not happening."

"My attitude, exactly," said Mike, a little grimly. "Now, to get back to the matter at hand—why did you people decide to build your transportation center right here by our ship?"

"Oh, it's no trouble, no trouble at all to run one up," said Morah. "We thought you'd want one convenient here."

"Then you have others?"

"Of course," said Morah. "We go back and forth among the Confederation a lot." He hesitated. "I've arranged for them to expect you tomorrow—if it's all right with you."

"Tomorrow? On Barzalac?" cried Mike.

"If it's all right with you."

"Look, how fast is this . . . transportation, or whatever you call it?" Morah stared at him.

"Why, I don't know, exactly," he said. "I'm just a sort of a rural person, you know. A few millionths of a second, I believe you'd say, in your terms?"

Mike stared. There was a moment's rather uncomfortable silence. Mike drew a deep breath.

"I see," he said.

"I have the honor of being invited to escort you," said Morah, eagerly. "If you want me, that is. I . . . I rather looked forward to showing you around the museum in Barzalac. And after all, it was *my* property you landed on."

"Here we go again," said Mike under his breath. Only Penny heard him. "What museum?"

"What museum?" echoed Morah, and looked blank. "Oh, the museum erected in honor of those other humans. It has everything," he went on eagerly, "artifacts, pictures—the whole history of these other people,

together with the Confederation. Of course"—he hesitated with shyness again—"there'll be experts around to give you the real details. As I say, I'm only a sort of rural person—"

"All right," said Mike, harshly. "I'll quit beating around the bush. Just why do you want us to go to Barzalac?"

"But the heads of the Confederation," protested Morah. "They'll be expecting you."

"Expecting us?" demanded Mike. "For what?"

"Why to take over the Confederation, of course," said Morah, staring at him as if he thought the human had taken leave of his senses. "You are going to, aren't you?"

Half an hour later, Mike had a council of war going in the lounge of Exploration Ship 29XJ. He paced up and down while Penny, Red Sommers, Tommy Anotu, and Alvin Longhand sat about in their gimball-ed armchairs, listening.

". . . The point's this," Mike was saying, "we can't get through to base at all because of the distance. Right, Red?"

"The equipment just wasn't designed to carry more than a couple of light-years, Mike," answered Red. "You know that. To get a signal from here to Altair we'd need a power plant nearly big enough to put this ship in its pocket."

"All right," said Mike. "Point one—we're on our own. That leaves it up to me. And my duty as captain of this vessel is to discover anything

possible about an intelligent life form like this—particularly since the human race's never bumped into anything much brighter than a horse up until now."

"You're going to go?" asked Penny.

"That's the question. It all depends on what's behind the way these Tolfians are acting. That transporter of theirs could just happen to be a fine little incinerating unit, for all we know. Not that I'm not expendable—we all are. But the deal boils down to whether I'd be playing into alien hands by going along with them, or not."

"You don't think they're telling the truth?" asked Alvin, his lean face pale against the metal bulkhead behind him.

"I don't know!" said Mike, pounding one fist into the palm of his other hand and continuing to pace. "I just don't know. Of all the fantastic stories—that there are, or have been, other ethnic groups of humans abroad in the galaxy! And that these humans were so good, so wonderful that their memory is revered and this Confederation can't wait to put our own group up on the pedestal the other bunch vacated!"

"What happened to the other humans, Mike?" asked Tommy.

"Morah doesn't know, exactly. He knows they died off, but he's hazy on the why and how. He thinks a small group of them may have just pulled up stakes and moved on—but he thinks maybe that's just a legend.

And that's *it*." He pounded his fist into his palm again.

"What's it?" asked Penny.

"The way he talked about it—the way these Tolfians are," said Mike. "They're as bright as we are. Their science—and they know it as well as we do—is miles ahead of us. Look at that transporter, if it's true, that can whisk you light-years in millisecond intervals. Does it make any sense at all that a race that advanced—let alone a bunch of races that advanced—would want to bow down and say 'Master' to *us*?"

Nobody said anything.

"All right," said Mike, more calmly, "you know as well as I do it doesn't. That leaves us right on the spike. Are they telling the truth, or aren't they? If they aren't, then they are obviously setting us up for something. If they are—then there's a catch in it somewhere, because the whole story is just too good to be true. They need us like an idiot uncle, but they claim that now that we've stumbled on to them, they can't think of existing without us. They want us to take over. *Us!*"

Mike threw himself into his own chair and threw his arms wide.

"All right, everybody," he said. "Let's have some opinions."

There was a silence in which everybody looked at everybody else.

"We could pack up and head for home real sudden-like," offered Tommy.

"No," Mike gnawed at his thumb. "If they're this good, they could tell

which way we went and maybe track us. Also, we'd be popping off for insufficient reason. So far we've encountered nothing obviously inimical."

"This planet's Earth-like as they come," offered Alvin—and corrected himself, hastily. "I don't mean that perhaps the way it sounded. I mean it's as close to Earth conditions as any of the worlds we've colonized extensively up until now."

"I know," muttered Mike. "Morah says the Confederation worlds are all that close—and *that* I can believe. Now that we know that nearly all suns have planets, and if these people can really hop dozens of light-years in a wink, there'll be no great trouble in finding a good number of Earth-like worlds in this part of the galaxy."

"Maybe that's it. Maybe it's just a natural thing for life forms on worlds so similar to hang together," offered Red.

"Sure," said Mike. "Suppose that was true, and suppose we were their old human-style buddies come back. Then there'd be a reason for a real welcome. But we aren't."

"Maybe they think we're just pretending not to be their old friends," said Red.

"No," Mike shook his head. "They can take one look at our ship here and see what we've got. Their old buddies wouldn't come back in anything as old-fashioned as a spaceship; and they'd hardly be wanted if they did. Besides, welcoming an old friend and inviting him to take over

your home and business are two different things."

"Maybe—" said Red, hesitantly, "it's all true, but they've got it in for their old buddies for some reason, and all this is just setting us up for the ax."

Mike slowly lifted his head and exchanged a long glance with his Communications officer.

"That does it," he said. "Now you say it. That, my friends, was the exact conclusion I'd come to myself. Well, that ties it."

"What do you mean, Mike?" cried Penny.

"I mean that's it," said Mike. "If that's the case, I've got to see it through and find out about it. In other words, tomorrow I go to Barzalac. The rest of you stay here; and if I'm not back in two days, blast off for home."

"Mike," said Penny, as the others stared at him, "I'm going with you."

"No," said Mike.

"Yes, I am," said Penny, "I'm not needed here, and—"

"Sorry," said Mike. "But I'm captain. And you stay, Penny."

"Sorry, captain," retorted Penny. "But I'm the biologist. And if we're going to be running into a number of other alien life forms—" She let the sentence hang.

Mike threw up his hands in helplessness.

The trip through the transporter was, so far as Mike and Penny had any way of telling, instantaneous and painless. They stepped through

a door-shaped opaqueness and found themselves in a city.

The city was even almost familiar. They had come out on a sort of plaza or court laid out on a little rise, and they were able to look down and around them at a number of low buildings. These glowed in all manners of colors and were remarkable mainly for the fact that they had no roofs as such, but were merely obscured from overhead view by an opaqueness similar to that in the transporter. The streets on which they were set stretched in all directions, and streets and buildings were clear to the horizon.

"The museum," said Morah, diffidently, and the two humans turned about to find themselves facing a low building fronting on the court that stretched wide to the left and right and far before them. Its interior seemed split up into corridors.

They followed Morah in through the arch of an entrance that stood without respect to any walls on either side and down a corridor. They emerged into a central interior area dominated by a single large statue in the area's center. Penny caught her breath, and Mike stared. The statue was, indubitably, that of a human—a man.

The stone figure was dressed only in a sort of kilt. He stood with one hand resting on a low pedestal beside him; gazing downward in such a way that his eyes seemed to meet those of whoever looked up at him from below. The eyes were gentle, and the lean, middle-aged face was

a little tired and careworn, with its high brow and the sharp lines drawn around the corners of the thin mouth. Altogether, it most nearly resembled the face of a man who is impatient with the time it is taking to pose for his sculptor.

"Morah! Morah!" cried a voice; and they all turned to see a being with white and woolly fur that gave him a rather polar-bear look, trotting across the polished floor toward them. He approached in upright fashion and was as four-limbed as Morah—and the humans themselves, for that matter.

"You *are* Morah, aren't you?" demanded the newcomer, as he came up to them. His English was impeccable. He bowed to the humans—or at least he inclined the top half of his body toward them. Mike, a little uncertainly, nodded back. "I'm Arrjhanik."

"Oh, yes . . . yes," said Morah. "The Greeter. These are the humans, Mike Wellsbauer and Peony Matsu. May I . . . how do you put it . . . present Arrjhanik a Bin. He is a S'niloid, one of the Confederation's older races."

"So honored," said Arrjhanik.

"We're both very pleased to meet you," said Mike, feeling on firmer ground. There were rules for *this* kind of alien contact.

"Would you . . . could you come right now?" Arrjhanik appealed to the humans. "I'm sorry to prevent you from seeing the rest of the museum at this time"—Mike frowned; and his eyes narrowed a little—"but

a rather unhappy situation has come up. One of our Confederate heads—the leader of one of the races that make up our Confederation—is dying. And he would like to see you before . . . you understand."

"Of course," said Mike.

"If we had known in advance—But it comes rather suddenly on the Adrii—" Arrjhanik led them off toward the entrance of the building and they stepped out into sunlight again. He led them back to the transporter from which they had just emerged.

"Wait a minute," said Mike, stopping. "We aren't going back to Tolfi, are we?"

"Oh, no. No," put in Morah from close behind him. "We're going to the Chamber of Deputies." He gave Mike a gentle push; and a moment later they had stepped through into a small and pleasant room half-filled with a dozen or so beings each so different one from the other that Mike had no chance to sort them out and recognize individual characteristics.

Arrjhanik led them directly to the one piece of furniture in the room which appeared to be a sort of small table incredibly supported by a single wire-thin leg at one of the four corners. On the surface of this lay a creature or being not much bigger than a seven-year-old human child and vaguely catlike in form. It lay on its side, its head supported a little above the table's surface by a cube of something transparent but

apparently not particularly soft, and large colorless eyes in its head focused on Mike and Penny as they approached.

Mike looked down at the small body. It showed no signs of age, unless the yellowish-white of the thin hair covering its body was a revealing shade. Certainly the hair itself seemed brittle and sparse.

The Adri—or whatever the proper singular was—stirred its head upon its transparent pillow and its pale eyes focused on Mike and Penny. A faint, drawn out rattle of noise came from it.

"He says," said Arrjhanik, at Mike's elbow, "'You cannot refuse. It is not in you.'"

"Refuse what?" demanded Mike, sharply. But the head of the Adri lolled back suddenly on its pillow and the eyes filmed and glazed. There was a little murmur that could have been something reverential from all the beings standing about; and without further explanation the body of the being that had just died thinned suddenly to a ghostly image of itself, and was gone.

"It was the Confederation," said Arrjhanik, "that he knew you could not refuse."

"Now wait a minute," said Mike. He swung about so that he faced them all, his stocky legs truculently apart. "Now, listen—you people are acting under a misapprehension. I can't accept or refuse anything. I haven't the authority. I'm just an explorer, nothing more."

"No, no," said Arrjhanik, "there's

no need for you to say that you accept or not, and speak for your whole race. That is a formality. Besides, we know you will not refuse, you humans. How could you?"

"You might be surprised," said Mike. Penny hastily jogged his elbow.

"Temper!" she whispered. Mike swallowed, and when he spoke again, his voice sounded more reasonable.

"You'll have to bear with me," he said. "As I say, I'm an explorer, not a diplomat. Now, what did you all want to see me about?"

"We wanted to see you only for our own pleasure," said Arrjhanik. "Was that wrong of us? Oh, and yes—to tell you that if there is anything you want, anything the Confederation can supply you, of course you need only give the necessary orders—"

"It is so good to have you here," said one of the other beings.

A chorus of voices broke out in English all at once, and the aliens crowded around. One large, rather walruslike alien offered to shake hands with Mike, and actually did so in a clumsy manner.

"Now, wait. Wait!" roared Mike. The room fell silent. The assembled aliens waited, looking at him in an inquiring manner.

"Now, listen to me!" snapped Mike. "And answer one simple question. What is all this you're trying to give to us humans?"

"Why, everything," said Arrjhanik. "Our worlds, our people, are yours. Merely ask for what you want.

In fact—please ask. It would make us feel so good to serve you, few though you are at the moment here."

"Yes," said the voice of Morah, from the background. "If you'll forgive me speaking up in this assemblage—they asked for nothing back on Tolfi, and I was forced to exercise my wits for things to supply them with. I'm afraid I may have botched the job."

"I sincerely hope not," said Arrjhanik, turning to look at the Tolfian. Morah ducked his head, embarrassedly.

"Mike," said Arrjhanik, turning back to the human, "something about all this seems to bother you. If you would just tell us what it is—"

"All right," said Mike. "I will." He looked around at all of them. "You people are all being very generous. In fact, you're being so generous it's hard to believe. Now, I accept the fact that you may have had contact with other groups of humans before us. There's been speculation back on our home world that our race might have originated elsewhere in the galaxy, and that would mean there might well be other human groups in existence we don't even know of. But even assuming that you may have reached all possible limits of love and admiration for the humans you once knew, it still doesn't make sense that you would be willing to just make us a gift of all you possess, to bow down to a people who—we're not blind, you know—possess only a science

that is childlike compared with your own."

To Mike's surprise, the reaction to this little speech was a murmur of admiration from the group.

"So analytical. So very human!" said the walruslike alien warmly in tones clearly pitched to carry to Mike's ear.

"Indeed," said Arrjhanik, "we understand your doubts. You are concerned about what, in our offer, is . . . you have a term for it—"

"The catch," said Mike grimly and bluntly. "What's the catch?"

"The catch. Yes," said Arrjhanik. "You have to excuse me. I've only been speaking this language of yours for—"

"Just the last day or so, I know," said Mike, sourly.

"Well, no. Just for the last few hours, actually. But—" went on Arrjhanik, "while there's no actual way of putting your doubts to rest, it really doesn't matter. More of your people are bound to come. They will find our Confederation open and free to all of them. In time they will come to believe. It would be presumptuous of us to try to convince you by argument."

"Well, just suppose you try it anyway," said Mike, unaware that his jaw was jutting out in a manner which could not be otherwise than belligerent.

"But we'd be only too happy to!" cried Arrjhanik, enthusiastically. "You see"—he placed a hand or paw, depending on how you looked

at it, gently on Mike's arm—"all that we have nowadays, we owe to our former humans. This science you make such a point of—they developed it in a few short thousand years. The Confederation was organized by them. Since they've been gone—"

"Oh, yes," interrupted Mike. "Just how did they go? Mind telling me that?"

"The strain—the effort of invention and all, was too much for them," said Arrjhanik, sadly. He shook his head. "Ah," he said, "they were a great people—you *are* a great people, you humans. Always striving, always pushing, never giving up. We others are but pale shadows of your kind. I am afraid, Mike, that your cousins worked themselves to death, and for our sake. So you see, when you think we are giving you something that is ours, we are really just returning what belongs to you, after all."

"Very pretty," said Mike. "I don't believe it. No race could survive who just gave everything away for nothing. And somewhere behind all this is the catch I spoke of. That's what you're not telling me—what all of you will be getting out of it, by turn-

ing your Confederation over to us."

"But . . . now I understand!" cried Arrjhanik. "You *didn't* understand. *We* are the ones who will be getting. You humans will be doing all the giving. Surely you should know that! It's your very nature that ensures that, as our friend who just died, said. You humans can't help yourselves, you can't keep from it!"

"Keep from what?" yelled Mike, throwing up his hands in exasperation."

"Why," said Arrjhanik, "I was sure you understood. Why from assuming all authority and responsibility, from taking over the hard and dirty job of running our Confederation and making it a happy, healthy place for us all to live, safe and protected from any enemies. *That* is what all the rest of us have been saddled with these thousands of years since that other group of your people died; and I can't tell you"—Arrjhanik, his eyes shining, repeated his last words strongly and emphatically—"I can't tell you how badly things have gone to pot, and how very, very glad we are to turn it all over to you humans, once again!"

THE END



SET A THIEF.

BY

H. C. ELLIOTT

And set a...well, who do you set to catch an Alien who looks like a super-lobster, but with interstellar spaceships? And, of course, Lord knows what super-devices to hassle with....

Illustrated by Schoenherr



"Waal, I just figgered what I'd of done if I'd of been the boss. An' I did, an' he had."

Legend.

*'E wants to finish 'is bit of work
And 'e wants to get 'ome to 'is tea.*

Kipling.



GENERAL James Falconer looked up like a small, white hawk, at the agitated sergeant in the doorway. "Yes, Tim?" His alertness was a triumph of mind over Morpheus, but perfect-

ly real from many decades of practice.

"They've broken out, sir," said Tim breathing heavily.

"The Homards, I presume you mean? How many? When?" Falconer showed no agitation and felt none. He did feel a fatalistic disgust. Never placing personal comfort above duty, he could still submit on occasion—as now—that duty might be more considerate in its timing. He *was* beat right this minute.

"Only one yet, sir. About ten minutes ago, sir."

"Why wasn't I 'phoned?"

"Cordon's blacked out, sir. It sabotaged all our power."

"Anyone hurt?"

"Not by the Homard, sir. Two men fell down a guard-tower stairs, and one got run over slightly, sir."

"Hm-m-m, I thought not." He sighed. After two eighteen-hour days of pandemonium, organizing Operation Visitors, he'd had it; a good sleep, with a hot toddy to guarantee it and an escapist book to see him off, was no luxury but essential maintenance for a man his age—and the only man on location able to meet emergencies without, as Navy so felicitously put it, running in circles, screaming, and shouting. He wanted to lie down and breath deeply. Good thing they hadn't bounced him out of the first depths of sleep, though. Firmly repressing his disgust, he called: "Julia!"

His secretary, plump, blond, and placid, materialized from an inner cubicle. She received a terse series of orders with affable calm, and began to rally the might of the Republic through a non-blacked-out headquarters phone.

The oft-proclaimed landing of flying saucers really had taken place three days ago. Only, this was more like a flying lobster pot, in shape and contents. The Homards, as Scientific Arm had dubbed them, resembled lobsters more than anything on Earth, except for a collar of tissue like a massive spare tire around where their necks should have been. Scientific Arm opined that this housed the brains wherewith Ho-

mardia had achieved interstellar flight and Lord knew what else. The creatures were six to twelve feet long, brilliantly and individually colored, and fearsome to behold. Yet so far, they had proved co-operative and eager to communicate across the formidable language barrier—theirs being mostly clicks and buzzes. Nevertheless, an anxious government had ringed the flying lobster pot with a formidable military cordon, while Scientific Arm strove to acquire conversational Homardish or to impart Basic English.

Now, co-operation and cordon had both been ruptured. A Homard had come over the fifteen-foot wire enclosure-fence, knocked out the transformer tapping the nearest h.v. power line, and vanished in the dark and panic. "One of the small, dull-colored ones Scientific Arm thinks are females," Sergeant Tim Mayberry concluded.

Julia, holding a phone, snorted delicately. "Why a female, if I may ask?"

Another phone rang. Democratically, the general took it. "Falconer here . . . Yes, John. Re-established power, have you? . . . What! *Another*? A big one would be a male, I understand . . . No, no shooting at all . . . No, John, I don't go along with you . . . Because, if they're aiming to conquer Earth, they wouldn't break out one at a time, on foot . . . No, John. Calm down. I'll meet you at Mess in five minutes. Meantime, orders are to capture, if possible, but on no account to injure unless hu-

man life is at stake—and that doesn't include nincompoops who get in the way. See you." He hung up and grimaced. But at least, grappling with John Redman had acted on his fatigue like a benzedroid pill. "Come along, Julia. Mind the phones till I get back, Tim. I'll be in the coffee shop."

Julia shouldered the tooled leather handbag, or coffer, without which she hardly even crossed the hall, and trotted after the general like a pouter pigeon in pixie horn-rims.

Sergeant Tim Mayberry looked after them philosophically. General Falconer sure was an improvement over Colonel John Redman. Redman had been the nearest commanding officer to the range country where the lobster pot had considerably landed. He had taken over, just a bit too competently. Sergeant Mayberry was in hearty accord with keeping the Homards under restraint; but Redman overdid things outrageously. They just *couldn't* be that dangerous, and hadn't tried to be—up to now. And now, after all this heavy guard duty, what good had it been?

Old Falconer, now, he'd only arrived yesterday, and already he knew darned near every man on the site, and had got the Scientific Arm boys working on how to talk to the Homards. And if he'd had time, *he'd* have worked out something to hold them in, or maybe just keep them calm. They said he'd pacified riots in the Maccabar Islands without firing a shot, and mediated the last Costagana civil war. But he'd left

control of Security here to Redman—probably to pacify Redman. And now look at things!

In the officers' lounge, Redman was waiting impatiently. A stocky, truculent man, he believed in getting results—any results. "Oh, there you are!" he grated. "Well, I've news for you. We've captured the first Homard."

"Ha! Very excellent. Three coffees, Miss Rundell."

"But the second, the big one that Scientific Arm claims is a male, threw some powder in the faces of the guard, and disappeared."

"What did the powder do to the men?"

"Oh, just blinded them for a moment. By then, the thing had vanished in the dark. I repeat my suggestion, sir, that we send out teams with all portable weapons, and finish the brute before innocent people get hurt."

"Doesn't sound too dangerous to me if that's the worst it did. How did they blow out your power?"

"Well, the first one, the female, made straight for the transformer cage we'd set up, and threw a metal cable into it. Of course, we had fireworks and a blackout. Luckily, a transport driver got his headlights on her just now and chased her till he backed her into a corner and we got one of those steel escalading-nets over her and hauled her off to the guardhouse. That's only a pre-fab affair, but I've got it heavily guarded."

"What other equipment had she besides the metal cable?"

"Enough to wreck every installation on the site: weapons in holsters, gimmicks belted on, mesh bags full of fantastic junk."

"Weapons, and she didn't use them?"

"No. Realized it would only mean trouble, I suppose."

"None of it makes sense. What do *you* think, Julia?"

"I think they're reeel gawn," she drawled, stirring her coffee.

Redman shot her a glance of ninety-nine per cent discount. It was bad enough being supplanted by a dithering septuagenarian with baggy eyelids and liver spots; but the man couldn't even pick personnel. Maybe that would be his Achilles heel. Redman grunted: "Well . . . what're we going to *do*?"

"Go and look at this captured equipment presently, John. Wait for more information . . . And here it comes now, I suspect." Falconer gestured towards a wild-eyed private writhing edgewise through the labyrinth of tables.

"Sir," heaved the private, "it's escaped again!"

"The female?" said Redman.

"How did it manage it?" said Falconer.

"We think the big one helped it, sir. Looks that way anyhow."

Falconer drained his cup and rose: "I think I'd like to look at that."

The night, already dark, was now drizzling, which would not add to

the cheer or bonhomie of search parties. Outside the guardhouse, a group with a diversity of flashlights was examining a window. The glass, heavily reinforced with steel mesh set in the metal frame, had been cut out in one neat slab. Falconer gave it a nearsighted peer, and sniffed non-committally.

Indoors, in the guard room, more men were examining the exhibit of Homard equipment, less from hopes of getting anywhere than for lack of any better course of action. There were the holsters, sure enough, with guns like a fantasy-illustrator's chef-d'oeuvre; and around them were ranged twenty-five or thirty other articles, the use of any one of which was any hop-head's privilege to guess. Falconer's beaky, inquisitive nose pointed at each in turn, but he said only, "Humph!"

Redman broke in sardonically: "Where're the Science boys? Why're we waiting for a report on this stuff?"

The lank major in charge said the Science boys were on the way: "And, uh, general, two of those Watchdogs of the Public Interest, from Uninhibited Press, have already dashed off to file stories."

Falconer sniffed: "Some of those boys would holler fire in a crowded theater, if they figured they could lead the stampede with a golden banner. Well, you can't stop 'em, Fred."

Redman barked, "No, but I think we'd better have another story to file before the morning editions come off the press." He strangled a re-

mark that, after all, he still had a career to ruin, whereas Falconer didn't.

Falconer gently laid aside a query as to whether a report of twelve-hundred men playing blindman's buff, over broken countryside, with lethal weapons, in the pitch dark and rain, would sufficiently delight the public.

A sudden chorus of "Heyyy!" diverted attention to Julia. She had drifted over to the table and was idly turning over a Homard side arm. She put it down with brisk docility and looked around plantively: "I didn't think it was reel," she said.

They told her just how real it could be. And she subsided.

The Major-warden, Fred, selected a couple of other articles as passively harmless and passed them around: a set of steel cubes magnetized with three north and three south poles, a shapeless mass of intense viscosity and a faintly putrid smell, and three exquisitely lifelike two-inch models of Homards.

Redman examined each intently, and finally remarked, "Well, does it occur to you that all this stuff might be an excellent set of burglar tools? These critters aren't setting out to conquer Earth singlehanded even with a pair of high-power ray-guns, as you said, general. In fact, they didn't make any effort that way—tried to elude us, not fight us. But they might be ve-ry adept burglars. As far as we can understand this stuff, it looks pretty useful for the purpose."

Falconer sniffed: "Can't go along with you, John. How'd they know what to steal or where it was? Our stuff must be as mysterious to them as theirs is to us and probably much less useful. They can't even speak or read our language."

"Or so they'd have us believe, general. Well, can you think up a better theory? Maybe *Julia*, here, can suggest something."

Julia squirmed unhappily: "Well, I did think it might be a lovers' quarrel. You know; she rushed off in despair and then he followed and rescued her from us. But all this stuff doesn't look much like it, I guess."

A terrific racket outside brought everyone to the door. The night was bleak with searchlights, mostly swinging at ground level. Between the guardhouse and the Homard ship a furious game of English soccer seemed to be in progress, with fifty players a team, all streaming violently in one direction and obstructing each other manfully. The ball, however, was at least as big as a man lying flat, tapered behind, and more than a match for all players. It veered and zigzagged at a terrific pace on ten pairs of multi-jointed legs, whipping out from under flung nets and outpacing bursts of tear gas which only complicated pursuit. Motor vehicles once more might have headed it off, but only by mowing down the infantry.

The small Homard reached the circle of steel fence that enclosed diplomatic privilege of Homardia on

Earth, went up it like a cat up a tablecloth, and headfirst down the opposite side without change of pace. The armed might of Earth surged against the fence, the rear ranks almost forcing the front ranks through the meshes in rectangular blocks, and obscured the next act of the drama. But in a moment, the glossy carapace of the refugee could be seen swarming up the side of the ship by the system of punctures that served its kind for ladders, and vanishing into the top.

"Well," drawled Redman sardonically, "that's *something* to tell the papers."

Falconer sniffed. "Turn off most of the lights, leave a good sector unguarded, and I venture to predict that you'll be able to report all present and accounted for within the hour."

Redman glowered. "Or the whole countryside swarming with them. My recommendation is to triple the guard, mount every weapon that you'll, uh, permit, and station vehicles whose headlights can't be bollixed. If this male shows up, we want to capture him and get a look at *his* equipment. Might give us a fix on *this* stuff here."

"Well, you're in charge of Security, colonel. I certainly won't go over your head. You carry on. I trust you'll have better luck than with that steel fence," said Falconer with parchment dryness. The lift of the coffee had quickly evaporated, and Redman became soporific rather than stimulatory, in large doses. "I'm go-

ing to take a nap in one of the cell bunks. But I'm to be wakened for any real development. That's an order, gentlemen—and Julia." He ambled off, aware that he was leaving Redman to a triumph dampened by conviction that his C.O. didn't think precautions would matter a fig, and doggedly resolved to prove they did.

Why, cogitated Falconer, removing his shoes, did his sleep have to be devoured, not by necessity, but by tomfoolery? Why this twin reaction of fearing the unknown and scheming to feather your nest from it before you even knew if it had feathers? To deal with the unknown, you had to be a chess player, calm, watchful, and canny. Redman couldn't even play checkers. Falconer turned in. Whatever the danger was, it wouldn't be what Redman thought anyway.

But Falconer's much-needed nap was disturbed by nightmares: The little model Homards out there, were not models but living young in suspended animation, to be planted where they could grow and multiply secretly. Even waking, after a doze of no more use than a lump of sugar to a starving man, the theory was so plausible that he went out to check. No one was there but Julia transcribing notes on the M. P.'s typewriter. The exhibit of Homardiana was still laid out on the table. But, true to premonition, the model Homards were gone.

Before he could even utter a sharp question, the door burst open and a

courier burst in: "Oh, there you are . . . uh, sir . . . uh, general. Sir, Lieutenant Orville wishes to report that they've captured the big Homard."

"Oh, they have? How'd they do it?"

"Well, sir, it just sort of gave itself up. It walked out of a barn right in front of our patrol and stood there twiddling its whiskers till they fetched a truck and loaded it in. I came ahead on my motorcycle."

Hm-m-m, yes! But first, it might have snooped around and retrieved those models, or whatnot; they had magnets, ultra-sticky adhesive, cords that went stiff as rods when you wished, all sorts of gimmicks to do it with; and Julia, focused on her spelling, would be oblivious to any furtive removal of the . . . well, models. Then plant the things. And then surrender and get returned to the ship.

Just at that moment, like the second courier of Fate in a Greek tragedy, in bustled a youngish lieutenant—obviously a brain-warrior, small, almost emaciated, crew-cut, but radiating brisk competence. "Oh, general, glad to find you, sir. I'm Lieutenant Carruthers. I've been in charge of investigating how the Homards effected the escape of the small one from the cell, sir."

"Yes, I understood that was in your hands. What have you found?"

"Well, not everything, sir. But after it threw that powder, the big one evidently disappeared by climbing onto the roof of Administration



—they can climb like squirrels, you know—you can see the marks where it grappled the wooden coping. Then it slung from that roof over to the guardhouse roof and hung by its tail over the cell window. It covered the glass with some sticky goop that would prevent any shattering noise . . .”

“Like this?” Falconer pointed to the viscous mass on the table.

“Yes, *sir*. Same aroma even. Then it cut out the glass, evidently with some really effective cutter, because that reinforced stuff will resist even a frantic prisoner unless he has tools.”

People had materialized like rabbits from a row of silk hats. “Well,” drawled Redman jauntily, “what price the burglar theory now, general?”

“Yes, John, you’re certainly building up a case,” said Falconer mildly, then turned back to Carruthers: “How could it have located the right window? The cell was on the side away from the ship, I believe.”

“*That* I haven’t figured out yet, *sir*. Sense of smell, maybe.”

A heavy truck with motorcycle escort pulled up outside, not furtively.

Everyone in the guardroom surged into the hallway.

They promptly surged back as the entrance admitted several enlisted men walking backwards with various implements at the ready, followed by a full-sized Homard. The total effect of the creature at close quarters, was disquieting in other than the obvious

ways. Certainly, its aspect of a magnified crustacean was grotesque and startling enough; and the differences from any terrestrial crustacean—large, hemispherical, non-facetted eyes, mandarin mustache of mobile bristles, and plume of feathery growths on its crown, to say nothing of the spare-tire brain case—only enforced the effect.

And yet—the thing had a certain aura of niceness, as one sometimes finds with hideously ugly people. Maybe the ruff of brain case gave it a fictitiously snuggled-in, cozy appearance. Maybe its walk indicated sensitive intelligence, co-operating with its captors in spite of apprehension. Maybe it simply looked groomed and self-respecting. Or all three; or more. Its only really repulsive feature was a lurking odor as of stagnant ponds.

It was followed by more guards, and another brain-lieutenant (sub-species, fat with thin legs and turned-out toes, like an egg cup). Once inside, the whole party halted.

Falconer stepped into the ample clear space that nobody grudged him, and said slowly, “We are sorry to inconvenience you, *sir*. But you probably realize that you have forced us to do so. We will release you presently.”

The Homard certainly understood not a word of this address. Yet, the general’s behavior could well be reassuring to an intelligent creature. Those who took stock in mental atmospherics, believed they could feel a tension drop of many psychovolts.

“Where do we put him, Fred?”

said the general to the warden, and then, to the Homard, "this way, sir." He gestured widely.

The Homard hesitated, then moved forward with surprising delicacy for a twelve-foot, half-ton body. Falconer edged along ahead of it, still gesturing courteously.

Most of the onlookers had never seen a Homard before, and none at close range. His jointed body and limbs were a dense salmon-color, intricately patterned in mold-green; but parts of the pattern were smudged or rubbed off, belying the dapper front elevation. His legs and under-side were liberally smeared with mud. And he limped in one leg.

Julia exclaimed, "Aw, the poor thing!" Others, perhaps moved by the tone of her voice, felt likewise.

Falconer returned from locking up the Homard, to encounter a pair of GIs grunting under the weight of a bag made from fine steel cable mesh—the prisoner's equipment. Several minutes were required to decode the ingenious multiple catch of the bag. It then disgorged a collection as heterogeneous as the other, but less nondescript. The items had a deadly elegance of form that argued professional ownership and use.

Most conspicuous was an instrument about a yard long, with a bowl-shaped enlargement at one end and a universal-joint nozzle at the other. Next in ominous significance was a plastic or horn block drilled with ten holes, of which seven contained six-

inch metal cylinders, tapering to a snout at one end, and ending at the other in a flat knob riddled with small holes. A wicked looking instrument had a similarly riddled grip, terminating in a pair of overlapping cutting-wheels.

Redman confiscated this last, and examined it minutely: "Hah! Now we know what he used for cutting out the window. See? Paint, which I will cheerfully prophesy matches what's on the frame."

The warden supplemented: "Here is the container for the powder he threw in the men's faces. Enough left for Scientific Arm to analyze."

The collection contained further: two foil bags containing a malodorous doughy substance; a pair of translucent ceramic cups; something like a thin, large tire casing; sheets of a tough foil, some blank, some intricately punched with pinholes; a hoop with a sliding outer ring that was marked like a slip stick; a stout cylindrical case containing what looked, for Pete's sake, like the drum of an old-time music box, bristling with fine prongs; a small but potent pair of snippers with the usual perforated grips; half a dozen little, empty sacs of something resembling chamois, each ending in triple prongs; what might have been a small, electric buffer, but with no visible source of power; and a dozen assorted ice picks, massive paper clips of odd design, washers, and such-like debris. All were minutely scrutinized and catalogued by the Scientific Arm boys.

"Well," drawled Redman when stock-taking was done, "if *that* isn't a burglary-and-sabotage kit, someone tell me what it *is*."

Nobody obliged. Julia murmured dubiously, "Well, I dunno." Falconer took a vexed drag from his cigarette and remarked petulantly: "Too many things there we don't understand. Can't theorize on ten per cent of the facts."

Redman pressed his advantage: "The fact remains that everything we *do* understand could be used that way. And three of them *have* been."

Falconer pinched his lips together: "Proves nothing. I could do a lot of things with my pocketknife. But that doesn't make me a burglar."

Redman scowled: "No, but an assorted kit for general mayhem and destruction would get you rolled in by any cop."

"Well, we've *rolled* him in, colonel. What more do you suggest? We've ringed the ship with everything we have, and they have no evident outside weapons. Let's hope they're intelligent enough to realize they've scared us. They might well take umbrage, sweep all our stuff aside, rescue their friend, and bounce off without giving us further contacts."

"Let 'em! Let 'em! Personally, I'd be plenty happy to see the last of them without innocent people getting hurt."

Yes, and Colonel John Redman greeting the news hounds and snowballing his contribution into a Congressional Medal. People were just

simpletons enough to fall for it, too. Fear and feathers. While opportunity stood, holding out incalculable possibilities to the human race.

The Scientific Arm linguistics man arrived, a tall, mild major with a small, gray mustache. Falconer greeted him as Lawrence, conducted him to the prisoner, introduced him, and left him with *carte blanche* though stoutly guarded.

Redman remained behind, fiddling with the alleged burglar kit. He greeted Falconer's return by brandishing the yard-long instrument triumphantly: "Like to guess what this turns out to be? Periscope. So now we know how he found the right cell window. The cup fits over his eye, and he can waggle the far end with these controls. Now, what would any honest individual want with a periscope? I'd like to bet we'll very soon label the rest of this stuff as similar hanky-panky."

Julia, trailing the general, said "Well-l-l . . ."

Falconer sniffed and conceded. "Quite a case, John, quite a case," and strode to the outer door. There he stood contemplating the circle of steel and spotlights that Redman had thrown around the boundary-fence, and wondering if the Homards thought it was normal Saturday Night Anywhere on Earth. He was silly with fatigue and playing by instinct but thank goodness, his instinct was usually sound after many years of learning the hard way. Those missing miniature Homards came to the fore of his mind again. They

fretted him more than all Redman's theorizing.

He was called back in to receive the interpreter's first report: "He can draw not badly, sir. And he seems to want that mesh bag."

Falconer raised his eyebrows: "Well now, that's too bad. I'm afraid he just can't have it. We don't want him blasting his way out."

"No, sir. I drew a big black criss-cross through the picture. I think he understood. But are there any little cylinders—like these?" He presented a large card on which a sketch had been drawn.

"Yes, there are, in that punched block," said Falconer dryly.

Redman craned for a view, and snorted: "I'd suspect that with these, he wouldn't need the rest of his kit to at least blast out the window."

"I'd doubt it, John. Anything strong enough to do damage would damage the occupant of the cell first, thick shell or not—blind him, most likely. I'm in favor of trying the experiment." *And if he does escape, we'll be out of a nasty dilemma, and let Redman and the rest howl.*

"You're in command." It was almost a taunt.

Falconer, Redman, the interpreter, and whoever else had hopes of getting a peek, trooped down the hall to the Homard's cell. Falconer peered through a barred grille in the door, spoke, and proffered the little cylinder with his fingertips. A slender, tri-nippered extremity appeared, closed on the cylinder, and with-

drew. A chattering noise followed.

"Could be thanks, satisfaction, mockery, anything," commented Falconer mostly to himself. "Now, he's poking those whiskers into the holes in the knob."

After a moment, he continued, "Well now! There's a curl of smoke—"

"Gee-ee-ee!" squealed Julia unheeded in the rear.

"I suppose the cell is fireproof?" Redman barked.

"He could burn the bed, that's all," said the warden.

Falconer went on, blow-by-blow, "There's quite a heavy coil of smoke coming out the tip . . . Well, I'll *be*! He's passing it from leg to leg, waving it with each leg . . . Now it's at the last one, and he's passing it under to the other side." He paused and coughed, "*Haugh!* Whatever it is, it's no incense!"

"Get back, general!" Redman tried to take over. "Probably it's poison."

"Nonsense. He'd still be locked in, and at the mercy of our survivors. *Haugh!* But I'll close the shutter and we can move, *HAUGH!*"

The whole party left, without dignity, and closed the door of the cell block corridor.

"Well," huffed Redman, "he's gained one thing anyway. No one can go near him till that smog clears—which may not be for hours. Warden, better get the ventilating system going full capacity."

Falconer did not countermand the

order, but effaced Redman without strain: "Colonel Redman, you could send for a guard detail with gas masks. One for outside too, in case he does break the window somehow. Lieutenant Carruthers, take a pick-up truck and get this stuff we've taken from the Homards to the safe in my office—Sergeant Mayberry there has the combination. Lieutenant Orville, contact Chem Serv and tell them to come on the double with apparatus for sampling gases." This left no one but buck privates, the linguist, and warden for Redman to annex.

Couriers sprinted, and phones buzzed. Julia took notes of procedure but found time to appeal to the unheeding air: "Gee, they sure have funny tastes, don't they?" Presumably she meant the Homards.

The remark was, for once, justified. The cell-block door was fire-and-riot-proof, but leaked at top and bottom. Whiffs of yellow vapor crept through. The odor bore the same relation to mere high-grade carrion that attar does to mere roses. It clobbered the nose and brain.

"Here's the gas-mask squad," said Falconer. "Let's leave them to it."

Everyone gladly followed his lead. But outside, the stench was, if anything, stronger. Somebody said, "It's the air-conditioner blowing it out. *Pew!*"

"Well, it'll soon dissipate out here," declared Redman.

In this, he was only partly right. Dissipation also means expansion. And the potency of the fumes was hard to overrate. As the staff party

walked briskly away, the odor kept pace, little palliated by the law of inverse squares. It swiftly reached the cordon of guards around the ship.

Now these had seen a platoon of men in gask masks go by on the double; which, to say the least, had alerted them. Their worst fears were now confirmed. No living man had yet smelt anything quite like they now smelt, and the nature of this unknown aroma was notably unreassuring. Morale deliquesced. Duty was all very fine; but a cordon of corpses would be no more effective than a mob of cowardly runaways, and runaways could live to fight another day. At the inevitable first shout of "Gas!" the rampart of Earth's security disintegrated. The staff party was almost trampled by bug-eyed humans fleeing to save their noses.

The situation was not one to be met with lucid explanations. You couldn't say, "We've been breathing it for ten minutes, and we're all right," to men who wouldn't be within earshot beyond "been." You could, and Redman did, shout "Halt!" in a parade-ground voice, with outspread arms. But these troops, though often gassed at, had never been gassed over, and were in the grip of tenderfoots' panic. They had always feared Redman's bite even worse than his bark, but now they didn't even see him. In two minutes, the cordon was a mass of push-buttons with no one to push them.

Redman dropped his arms: "Well, now comes the sortie, I suppose, and

we'd better get out of here. Where shall we regroup?"

"Schuylerville," said Falconer abstractedly. "I doubt they'll come any farther than the lockup. But we do need one commander out of the danger zone. You run along, colonel. I'll direct the Press to go there, too." He peered: "Hm-m-m! Here comes one of them now . . . Homards, not press."

Something moved at the top of the ship, but did not descend.

"Well I'll *be*!" said Falconer. "That looks like a white flag."

Redman postponed his departure: "Yes, *looks* like it. But I don't suppose the symbol is interstellar."

"Nonsense, John. *We* used one. They'd copy us—wouldn't *you*? So, if there's any chance they want a parley, I'm going to try it."

"Well . . . just remember Teheran and Yalta."

"Time for that when they've double-crossed us once . . . You there, Lawrence?" he said to the linguistics man, "come along, you might be useful."

He set off towards the wire fence. A trick of the floodlights silhouetted him chiefly from the waist down: His legs were the tired-knee legs of an old man, but he walked like a thoroughly resolute old man, chin out and arms swinging loosely. The interpreter's legs were reluctant but disciplined.

Julia also went. Her well-filled, tweedy skirt ambled along briskly, tapering down to rotund calves and spike heels. Somehow, that spectacle

grieved Redman. Maybe he *was* practically under orders to pull out. Maybe it *was* Falconer's duty to take a chance, and the interpreter's to follow command. But Julia bobbling blandly into the front line, signified that John Redman would never qualify for permanent command of Operation Visitors. Not unless this interview turned out to be a massacre—he almost hoped.

As the group approached the fence, Julia fumbled in her handbag, drew level with the general, and offered him a handkerchief: "Maybe we better have a flag of truce too, or they wouldn't trust us."

"You're right about that," said he, taking it abstractedly. Then: "Look, Julia, I don't think there's any need for you to come. Go on back."

"I can take notes, can't I?"

"Hm-m-m! How're you going to write a lot of buzzes and clicks?"

"Well, I can record *those* on my little unit here. And I can write what happens, and they'd find it on our bawdies if anything happened."

He dismissed the argument: "So you think something will happen?"

"Oh, not reeely. I think they're perfectly harmless, just real weird, like that smoke. But you should *always* keep a record of *everything*. Then you can throw it out if it's no good later." Julia remembered what she had learned in Secretarial School!

Falconer considered her sideways. How much of the world's achievement, he pondered, had been achieved by the valor of oblivion?

Or the valor of not-much-to-lose, as in the case of an old man like himself?

They reached the fence, whose fifteen feet and barbed-wire overhang had not impeded the Homards in the slightest. Falconer found a corner of the handkerchief, which was big and practical, and flapped it open. Something flipped out, hit a wire of the fence with a dull tunk, and bounced into the enclosure. "Oh! I'm afraid we've lost your lipstick or something," said he. "It was caught in the handkerchief."

"That's all right," she said placidly. "They'll prob'ly trade it back."

He watched the ship and meditated further on courage: When you *know* your danger, you are simply playing odds. When you *know* the danger isn't real, you are putting on an act. But when you are completely in the dark, that really tries your nerve—if you have any. Like now.

A large Homard swarmed nimbly down the ship, and rippled terribly but beautifully across the intervening ground. Man and Homard confronted each other through the rectangular meshes. This specimen was lemon yellow, curlicued in a cruel shade of electric violet. It had big nipper-claws. Falconer judged Homards could snip through that fence before he could even turn to run, and that they hadn't done so simply as a matter of good breeding. In fact, once more, he got a strong impression that the creature was what the British would call a decent sort. that the great, globular eyes had more than

the optical glitter of insect eyes. You *could* communicate with it.

He said, "Lawrence, you've got your pad. Draw a Homard, and draw an outline of the guardhouse around it."

The Homard envoy waited motionless, took the sketch through the fence, and unrolled it matter-of-factly. After a moment, it reached out a dexterous forelimb. Falconer offered it the pencil, which the creature promptly took and began to use, holding the pad with three limbs. Its contribution, when the drawing was returned, proved simple and graphic: a small circle, a large circle around it, and a line leading from the guardhouse to the big circle and ending in a ball. "Ship, fence, bring back our friend—ball being their version of an arrow," Falconer interpreted.

"Here, Lawrence," he said, "show smoke coming out of the critter there and people running away."

Again the Homard scrutinized the human drawing and chattered softly—amusement, derision, tch-tch-tch, puzzlement . . . ? Again it took the pencil and worked briskly. But this time, the results were baffling: a series of heavy circles drawn all around the guardhouse, as if to reinforce the billows of smoke. A threat? Or what?

To build a spaceship you had to have blueprints, and that demanded high graphic ability. But drawings were, after all, a system of conventions, often incomprehensible to even another human culture. A dog or a

monkey sees nothing in the most realistic drawing. A triumph of symbolizing intelligence, that Homard and Man had gotten as far as they had. Dead end now. And he couldn't even explain that he didn't understand . . . His eyes were loaded with sleep. Ingenuity seemed at an end . . . end . . . end. He merely clung to the determination that good will and common sense must prevail.

Evidently, the Homard did realize that the conference had bogged down. It twisted its fore end back and began to buzz and tick deafeningly. Answering racket came from the top of the lobster pot. And the exchange went on tediously, with long gaps, for minutes. Then, suddenly, another Homard appeared clambering down with apparent reluctance. On the ground, it started towards the fence but at a deceleration that promised to halt it halfway. It was a small one; and if it were the original raider, Falconer could heartily sympathize with its qualms. The big one urged it on with imperious clackings and clatterings, till it halted positively at a thoroughly safe distance from the fence.

Even to human eyes, it was the most bedraggled Homard possible: it was a pond-weed green, with no pattern. Its mustache and feathers drooped; its joints sagged; its legs were smeared with some oily substance; even its eyes looked dull. It emitted an odor allied to banana oil.

Julia said again, "Aw, the poor thing!" The general fleetingly re-

called her first theory of a "lovers quarrel." Was this the bereft damsel, in despair for her heroic mate captured by intra-Terrestrial monsters? At least the exhibition could be intended only to arouse pity. If you assumed intelligences able to communicate at all, compassion for the unfortunate was a highly probable response—except in case of ruthless savagery, which neither side had displayed so far. Yes, but . . .

Redman backed *his* pony on ten per cent evidence. Falconer couldn't back his on even less. He *wanted* the Homards to be nice guys. Was he trimming the facts to fit? Was all this maybe a calculated play on his emotions?

Lawrence had been scrutinizing the drawing. Now he cleared his throat for attention: "Uh, sir! I'd like to hazard a guess. Look, they used a circle to indicate an arrow here, or maybe end-of-the-line, you know. Well then, circles might mean cancellation, finish—like we use crosses. So, all this could mean 'No more smoke.' That's just a suggestion, sir."

Falconer studied the page with knit brows. Yes! Those circles could very well mean just that. Indeed, now he could hardly see what else they could possibly mean—a promise, an apology. Another scrap of evidence. Only that.

He looked around, half dazed with mental tension, at the dozens of spotlights glaring forsaken, at the queer equipment of human deadliness, at the drizzle, tinsel in the sav-

age light, at the other two humans and the two glossy monsters like varnished stage-things in a pantomime. And he experienced the old, lost feeling: What am I doing here?

But the answer came back sober, not cynical: Tipping a balance.

A wrong decision could lose mankind the greatest opportunity in history. Or it might sacrifice millions of people to unknown horrors.

To choose, he had only straws of evidence in the wind of his own conviction. And against him were ranged the hostile acts of the Homards, their sinister equipment, the disappearance of the "models."

In that case, John Redman was right: You couldn't take chances. You held onto the prisoner till you could communicate—which might take years—and hoped the Homards would be patient . . . Would *you* be patient with a shipmate in the hands of incomprehensible monstrosities? . . . And if they attempted a rescue, you used artillery. And *then* what? . . .

Or you let yourself be bluffed, and the enemy went farther next time. They always did.

If you were John Redman, you simply estimated the maximum product of safety-times-self-interest, and plugged ahead. That was easy.

But if you had to make a decision . . . for *man's* best interests . . .

Arguments went chasing their tails and each other, till they banged a groan of anguish out of him: "The wretched thing only wants to go *home!*"

"Well, sure," said Julia, "I don't think she'd do much harm. Reely!"

He turned to her: "What makes *you* so . . . ? *She*? What do you mean?"

She stared at him, round-faced behind her pixie glasses: "Well, maybe I'm crazy, but it all works out. I mean, she'd *baff* to be a she to have all those things. Wouldn't she?"

"*Would* she? What things?"

"Well, sure." She hitched around her handbag and opened it: "Look, if you were one of *Them*, what would you think of all this stuff?"

"Yes, and what would I think of a burglar's kit?" But it was a straw!

"Well," she giggled, "you *can* use bobby pins to pick locks, and gum to gum things up, and powder to throw in the faces of assailants."

"Yes." The straw was bearing his weight: "But not periscopes, and heavy snippers, and gas. No, I still can't go along with it, Julia."

She reacted to opposition: "But, general, they're so big and tough, with shells, and bristles. Suppose they wanted, well, like to trim their eyebrows, they'd *baff* to have strong things, wouldn't they? Anyway, I've been sort of matching all those things with what I've got here and it actually does work out, mostly. Except, of course, we'd be *bound* to have *some* things different, I guess."

"Go on. You're making out a better case than Colonel Redman anyway."

"Well then," she urged earnestly, "there were glove things—or rubbers maybe—and a rain cap, and a thing

for polishing herself, and dark glasses, and something like chewing gum . . ."

"Yes but, see here," Falconer interrupted, "why in the world would she have all that junk on a spaceship and bring it with her out here?"

"Well-I-I, it would be just *there*, in the bag, and she'd bring the bag because you never know what might be useful. And it was, wasn't it?"

"Hm-m-m! Hm-m-m! Go on."

"Well then, that stuff in rolls. Lieutenant Carruthers told me they sort of breathe through their knees." She snickered: "So maybe that could be hankies. See, they could reach back and pull the strips across their joints, like. Like you said they did with the smoke."

Falconer noted that the small Homard did indeed seem to need just such attention. But . . .

"Very ingenious," said the voice of Redman sardonically.

Falconer turned to find that the staff party, presumably dismissed, had drifted down, now that danger seemed something less than apocalyptic. It was further reinforced by two reporters, a young one who sedulously dressed the part with shoved-back hat and feverishly unbuttoned shirt collar, and an older one distinguishable from a car salesman or broker's clerk only by his flash bulb camera. All were listening avidly.

"All right," said Falconer, "what about that prickly roller?"

"Well, I'm not so sure, but it could be a sort of writing thing. Because, it *could* have made the marks

on those foil sheets, and maybe those are memos or letters or something."

"Very ingenious indeed," said Redman acidly. "But it still doesn't account for the really major items. Such as the periscope."

Julia wriggled slightly: "Well . . . *that* was what gave me the idea *first*. You see . . . well-what you use most in a handbag is practically your mirror, and when you called it a periscope, it just sort of struck me. You see, those patterns on her tail, they couldn' be real, because they rubbed off. So how would she get them on? She couldn' see herself past that bulge-thing around her neck except maybe the end of her tail. So she'd *haff* to have a periscope. And anyway," she giggled again, "women do use mirrors for peeking around corners and behind them and things."

Redman didn't say "ingenious" this time; it was too true for sarcasm. He frowned instead, but then brightened: "*All* right. But what about the smoke? I suppose you carry poison gas in your bag, too?"

Falconer intervened: "Accept the frame of reference, John, and you'll get it. These Homards are lobster-like ha? And lobsters relish carrion, don't they? The odor is delightful to them. What *we* like might be nauseous to them; and vice versa. And what would be the first thing *you'd* want if you were locked up and your pockets emptied? Cigarettes, I'd say."

Redman looked like a man pinned to his last line of defense: "All right,

so the case is plausible. It isn't proved."

"Now you just look here, colonel," said Falconer testily at last, "of two theories, you accept the one that explains the most facts."

"Very good. Let's hear it explain what the smaller one, the male according to this theory, was carrying, and the damage *he* did."

Everyone looked at Julia.

"Well," she faltered, "I hadn't worked that out so well. Because, after all, I don't know so much about little boys. But anyway . . ."

Falconer laughed and rubbed the end of his nose gleefully.

She went on: ". . . But those little cubes would make a peachy game. And *he* had gum, too. And a lot of that stuff was prob'ly like a cowboy or spaceman suit, and the guns *were not* real, and he really *was* raiding us, only he didn't know what his lasso-thing really would do. And so . . ."

Redman shrugged and dangled his hands palms out: "Oh well! If you are going to drag in the contents of a kid's pockets . . ."

"Glad you agree, John, glad you agree!" said Falconer briskly. He turned to the warden: "Fred, you hurry back and release the lady with our apologies. Lawrence, you run back to my quarters with the pickup and get the lady's handbag and her son's valuables from Sergeant Mayberry."

In the ensuing lull, Falconer overheard a vehement whispered argu-

ment between the two reporters just behind him.

"Look, Pete, you mean to tell me you think Daisy Banjo-eyes worked that out all by herself?"

"Look, Chuck, what sort of sim'l'on are you anyway? Who makes the best story, a superannuated general or a pretty girl . . . well, fairly pretty? Who do you want to date, him or her? Now: Let's line her up with the lobsters and take a flash."

Falconer smiled sleepily. Why disillusion them when everybody was happy—everybody that mattered—the Press with a Story, Julia with dates and celebrity, Washington with a satisfying report, the Homards with friendship, and himself with warm, blessed bed after a good job done?

The old formula! He hadn't even planned for it here; he'd just been lucky. But it'd worked anyway. What was all this nonsense that because a person looked dumb and talked vaguely, they had to be dumb about *everything*? Almost anyone was an expert on something, if you knew where to look. On the contrary, a universal genius like John Redman—no, even John Redman might come up with something if you had to deal with Colonel Blimpsy. Falconer yawned, awaiting a decorous opportunity to toddle home.

On any assignment, surround yourself with specialists in the problem, and let them marinate in the situation. When dealing with plain, sidewalk humanity, you had plain, well-meaning assistants. So, your let-

ters were full of corrections, and your messages garbled; but you had a stethoscope to the great, beating public heart before its coronaries went bloeey in riots or crusades. Take that grinning joss Daawid, back in the Maccabars, who'd tipped him off about Red agitators capitalizing on his morning bacon. Or Rosa, that Latin counterpart of Julia, who had casually revealed that General Jesus y Maria Gutierrez' troops would desert at the drop of a frijole.

But who'd ever have expected Julia to find a resonant soul in a Homard shell? Just went to show that once you attained symbolizing intelligence, the results were bound to be convergent. To be sure, what was a grab-bag-toting female, with an untuly brat, doing on a spaceship anyway? Dared one hope to find aboard, one's own opposite number with a similar formula for picking assistants? Probably too much to ask. His thinking was cloudy with sleep.

Yet still, he harbored an uneasy feeling that the case wasn't quite closed, that he still had an exposed flank. *What* the devil had he overlooked?

Answer came benevolently: A camera's H-bulb blinked and left

everyone with the usual cadaverous expression. The Homards skittered nimbly backwards and stood staring bug-eyed. *Though how else could they stare?* Then the small one tilted its head and picked up something. Julia's lipstick?

No, sir! The missing piece of puzzle fell into place. *That* was one of those miniature Homards he had forgotten to worry about for the past ten minutes—him and his fool theory! Whatever piece of bland sentiment had led Julia to annex the thing, there it was, harmless as a toy soldier.

In fact, Julia was fumbling in her bag, holding out another miniature through the fence, wheedling the reluctant young Homard. "Tum on, lambie. *Tum on. I won't hurt you,*" warbled Julia.

Maybe it was just as well that a self-respecting space-wrangler didn't understand more than her gesture. He approached doubtfully. Another H-bulb blinked.

Symbolizing intelligences had established rapport.

Falconer, leaving the limelight to those who enjoyed it, turned into the comfortable dark, and homed on a hot toddy and snug blankets.

THE END



THE



Illustrated by Freas

PIRATES
OF ERSATZ

BY MURRAY LEINSTER

Conclusion. *There are a lot of combinations of "want" and "need" and "not." Sometimes people want-not what they need, and again they need-not what they want, and really it's rather rare that they need what they want. And it's then that a thoughtful, well-trained Pirate can be of great benefit....*

SYNOPSIS

Bron Hoddan can see no future in space-piracy as practiced by all his relatives on his home world of Zan, so he goes to Walden to accomplish great things, grow rich, and marry a charming girl. Walden, of course, is the most civilized planet in this part of the galaxy. Hoddan has prepared himself to be an electronic engineer, but finds that Walden wants no improvements. To get attention paid to a broadcast-power receptor he has devised, he secretly installs it in a power station and smashes the original unit so his takes over. But when it's discovered he's arrested and charged with every crime from burglary to mayhem. At his trial everybody is scared but himself. His device has been melted down, his drawings burned, and every effort is made to keep anything from being revealed. But he's locked up until somebody posts bond that he won't do such a thing again. Then somebody tells him that his device made death rays which killed a man outside the power station, his bond has been set at fifty million credits—which nobody will post—and he's locked up for

life so he can't tell anybody else how to make death rays.

It's absurd. He escapes, in a manner to infuriate the police. He takes sanctuary in the Interstellar Embassy, where the Interstellar Ambassador agrees that death rays are impossible, tells him that Walden is on the brink of decadence from complacency, and offers him transportation away. He has a letter from a feudal nobleman on DARTH, one Don Loris, asking for an electronic engineer to be sent him. If Hoddan wants that opening—

Hoddan bitterly accepts. But the Waldenian government demands his surrender from the Embassy, rings it about with cops, and lures him outside into an ambush by a forged note from a girl named Nedda, whom Hoddan has been thinking of marrying. But Hoddan was suspicious and went prepared. So he literally scorches the pants off the cops in ambush, captures a dozen stun-pistols, and again infuriates the cops by the way he gets back to the Interstellar Embassy.

To get to the spaceport he has again to infuriate the planetary authorities, and the Ambassador congratulates him sedately. The space

liner takes off, stops briefly at the bustling world of Krim, and lands him on DARTH, which is a feudal-system planet without even broadcast power. The local customs are remarkable. His possessions are appropriated by the first-comers as of right. He recharges a stun-pistol from the spaceport equipment, recovers his possessions by knocking out those who had them, and finds that one of the looters is a certain Thal, a retainer of Don Loris, there at the spaceport to meet him. Then friends of the looters essay to lynch him for resisting robbery, he defeats them, and Thal happily picks their pockets—another local custom—and they ride for Don Loris' castle. Sunset comes as they ride, and three bright lights flash across the sky. They are spaceships in orbit. Hoddan gloomily considers that Walden sent them after him.

When Don Loris hears that stun-pistols were used on DARTH, he laments it bitterly. He had plans, which that fact messes up. Hoddan and Thal have to vanish. Immediately. But he has some nice cozy dungeons. They'll be comfortable . . . But Don Loris' daughter, Fani, interposes. She's refused to marry a local chieftain, and by DARTHIAN custom he will be considered a man of no spirit unless he kidnaps and marries her anyhow. So she's followed everywhere by guards, and after Hoddan's triumphant fighting at the spaceport she wants him for a guard. But in the middle of the night her suitor breaks in or bribes his way into the

castle, carries her off, and there is nobody with any hope of rescuing her but Hoddan. He pursues gloomily with Thal and about a dozen men he instructs in the use of stun-pistols on the way.

They fight through an ambush set by the suitor, capture his castle, and rescue Fani. But the stun-pistols are pretty well discharged. Hoddan heads back to the castle by way of the spaceport. He finds the ships still aloft and—considering them from Walden—he disables the landing-grid. Riding back to Don Loris' castle, he goes wearily to sleep, until waked by the news that instead of three spaceships overhead, there are now nine.

Two Waldenians have appeared at Don Loris' castle. They landed elsewhere in a space lifeboat because the grid isn't working. They found out where Hoddan was—because of his prowess in fighting—and came to make a deal with Don Loris to surrender him. Don Loris zestfully tries to bargain with Hoddan instead for a death-ray generator, but he says it's impossible. Don Loris then goes happily back to dicker further. Fani says bitterly that her father will sell him out, so he slides down a rope she's prepared, rides to where the spaceboat landed, tricks his way inside, takes off, and when in orbit starts to hunt for the nine ships. He's found out that they are not from Walden. They offer his only chance of refuge.

But he doesn't find nine ships. They were scouts. There's an enor-

mous, incredible fleet pouring out of space. It's a fleet of relics, of antiques, of ships that ought to be in junk yards. There are more than two hundred of them. And of course there ought not to be any such thing as a space fleet in existence anywhere.

He gets into communication with them and lands his spaceboat in the leader's monster ship. The fleet is of emigrants, bound to a new planet. They are a religious sect who traded all their possessions for this fleet, food, and equipment with which to subjugate a new planet they're migrating to, where they can live according to their own ideas. But after two years on the way they discovered they were cheated. The ships are junk, of course, but the equipment supplied them isn't even that. It's trash. If they land without equipment they'll starve—most of them, anyhow. They stopped at Darth to beg for worn-out equipment—anything—to help them save at least a part of their number. Obviously, no already-settled planet can accept so huge a population with nothing but its manpower to make a living with.

Hoddan is indignant. Darth can't help them. There'll be no help for them anywhere. And it isn't his business, but in charity he says that if they'll lend him a small ship for an interstellar trip, he'll go to Walden, contact the right people, and get more charitable contributions than they are likely to get without his help. They agree, and make a small yacht ready. He descends to Darth outside Don Loris' castle, kidnaps

That and half a dozen others for crew, goes back up, and having changed ships starts for Walden. He explains to his kidnaped followers that the fleet is one of pirates, and they will be allowed to join it if they fight bravely, and have their throats cut if they don't.

On the way to Walden, Hoddan rebuilds some of the little yacht's equipment into apparatus used by his piratical family. He takes a space cargo-ship as it rises from Walden—its crew escaping as he wishes it to.

PART 3

CHAPTER IX



NORMALLY, at overdrive cruising speed, it would be a week's journey from Walden to the planet Krim. Hoddan made it in five days. There was reason. He wanted to beat the news of his piracy to Krim. He could endure suspicion, and he wouldn't mind doubt, but he did not want certainty of his nefarious behavior to interfere with the purposes of his call.

The space yacht, sealed tightly, floated in an orbit far out in emptiness. The big ship went down alone by landing-grid. It glittered brightly as it descended. When it touched ground and the grid's force fields cut off, it looked very modern and very crisp and strictly businesslike. Actually, the capture of this particular liner was a bit of luck, for Hoddan. It was not one of the giant inter-cluster

ships which make runs of thousands of light-years and deign to stop only at very major planets. It was a medium ship of five thousand tons burden, designed for service in the Horsehead Nebula region. It was brand-new and on the way from its builders to its owners when Hoddan interfered. Naturally, though, it carried cargo on its maiden voyage.

Hoddan spoke curtly to the control room of the grid.

"I'm non-sked," he explained. "New ship. I got a freak charter party over on Walden and I have to get rid of my cargo. How about shifting me to a delay space until I can talk to some brokers?"

The force fields came on again and the liner moved very delicately to a position at the side of the grid's central space. There it would be out of the way.

Hoddan dressed himself carefully in garments found in the liner's skipper's cabin. He found Thal wearing an apron and an embittered expression. He ceased to wield a mop as Hoddan halted before him.

"I'm going ashore," said Hoddan crisply. "You're in charge until I get back."

"In charge of what?" demanded Thal bitterly. "Of a bunch of male housemaids! I run a mop! And me a Darthian gentleman! I thought I was being a pirate! What do I do? I scrub floors! I wash paint! I stencil cases in cargo holds! I paint over names and put others in their places! Me, a Darthian gentleman!"

"No," said Hoddan. "A pirate. If

I don't get back, you and the others can't work this ship, and presently the police of Krim will ask why. They'll recheck my careful forgeries, and you'll all be hung for piracy. So don't let anybody in. Don't talk to anybody. If you do—*ppft!*"

He drew his finger across his throat, and nodded, and went cheerfully out the crew's landing-door in the very base of the ship. He went across the tarmac and out between two of the gigantic steel arches of the grid. He hired a ground vehicle.

"Where?" asked the driver.

"Hm-m-m," said Hoddan. "There's a firm of lawyers . . . I can't remember the name—"

"There's millions of 'em," said the driver.

"This is a special one," explained Hoddan. "It's so dignified they won't talk to you unless you're a great-grandson of a client. They're so ethical they won't touch a case of under a million credits. They've got about nineteen names in the firm title and—"

"Oh!" said the ground-car driver. "That'll be— Hell! I can't remember the name either. But I'll take you there."

He drove out into traffic. Hoddan relaxed. Then he tensed again. He had not been in a city since he stopped briefly in this on the way to Darth. The traffic was abominable. And he, who'd been in various pitched battles on Darth and had only lately captured a ship in space—Hoddan grew apprehensive as his ground-car charged into the thick of

hooting, rushing, squealing vehicles. When the car came to a stop he was relieved.

"It's yonder," said the driver. "You'll find the name on the directory."

Hoddan paid and went inside the gigantic building. He looked at the directory and shrugged. He went to the downstairs guard. He explained that he was looking for a firm of lawyers whose name was not on the directory list. They were extremely conservative and of the highest possible reputation. They didn't seek clients—

"Forty-two and forty-three," said the guard, frowning. "I ain't supposed to give it out, but—floors forty-two and -three."

Hoddan went up. He was unknown. A receptionist looked at him with surprised aversion.

"I have a case of space piracy," said Hoddan polite. "A member of the firm, please."

Ten minutes later he eased himself into the easiest of easy-chairs. A gray-haired man of infinite dignity said:

"Well?"

"I am," said Hoddan modestly, "a pirate. I have a ship in the spaceport with very convincing papers and a cargo of Rigellian furs, jewelry from the Cetis planets, and a rather large quantity of bulk melacynth. I want to dispose of the cargo and invest a considerable part of the proceeds in conservative stocks on Krim."

The lawyer frowned. He looked

shocked. Then he said carefully:

"You made two statements. One was that you are a pirate. Taken by itself, that is not my concern. The other is that you wish to dispose of certain cargo and invest in reputable businesses on Krim. I assume that there is no connection between the two observations."

He paused. Hoddan said nothing. The lawyer went on, with dignity:

"Of course our firm is not in the brokerage business. However, we can represent you in your dealing with local brokers. And obviously we can advise you—"

"I also wish to buy," said Hoddan, "a complete shipload of agricultural machinery; a microfilm technical library, machine tools, vision-tape technical instructors and libraries of tape for them, generators, and such things."

"Hm-m-m," said the lawyer. "I will send one of our clerks to examine your cargo so he can deal properly with the brokers. You will tell him in detail what you wish to buy."

Hoddan stood up.

"I'll take him to the ship now."

He was mildly surprised at the smoothness with which matters proceeded. He took a young clerk to the ship. He showed him the ship's papers as edited by himself. He took him through the cargo holds. He discussed in some detail what he wished to buy.

When the clerk left, Thal came to complain again.

"Look here!" he said bitterly, "we've scrubbed this ship from one

end to the other! There's not a speck or a fingermark on it. And we're still scrubbing! We captured this ship! Is this pirate revels?"

Hoddan said:

"There's money coming. I'll let you boys ashore with some cash in your pockets presently."

Brokers came, escorted by the lawyer's clerk. They squabbled furiously with him. But the dignity of the firm he represented was extreme. There was no suspicion—no overt suspicion anyhow—and the furs went. The clerk painstakingly informed Hoddan that he could draw so much. More brokers came. The jewelry went. The lawyer's clerk jotted down figures and told Hoddan the net. The bulk melacynth was taken over by a group of brokers, none of whom could handle it alone.

Hoddan drew cash and sent his Darthians ashore with a thousand credits apiece. With bright and shining faces, they headed for the nearest bars.

"As soon as my ship's loaded," Hoddan told the clerk, "I'll want to get them out of jail."

The clerk nodded. He brought salesmen of agricultural machinery. Representatives of microfilm libraries. Manufacturers of generators, vision-tape instructors and allied lines. Hoddan bought, painstakingly. Delivery was promised for the next day.

"Now," said the clerk, "about the investments you wish to make with the balance?"

"I'll want a reasonable sum in cash," said Hoddan reflectively. "But

... well ... I've been told that insurance is a fine, conservative business. As I understand it, most insurance organizations are divided into divisions which are separately incorporated. There will be a life-insurance division, a casualty division, and so on. Is that right? And one may invest in any of them separately?"

The clerk said impassively:

"I was given to understand, sir, that you are interested in risk-insurance. Perhaps especially risk-insurance covering piracy. I was given quotations on the risk-insurance divisions of all Krim companies. Of course those are not very active stocks, but if there were a rumor of a pirate ship acting in this part of the galaxy, one might anticipate—"

"I do," said Hoddan. "Let's see. ... My cargo brought so much ... Hm-m-m ... My purchases will come to so much. Hm-m-m ... My legal fees, of course ... I mentioned a sum in cash. Yes. This will be the balance, more or less, which you will put in the stocks you've named, but since I anticipate activity in them, I'll want to leave some special instructions."

He gave a detailed, thoughtful account of what he anticipated might be found in news reports of later dates. The clerk noted it all down, impassively. Hoddan added instructions.

"Yes, sir," said the clerk without intonation when he was through. "If you will come to the office in the morning, sir, the papers will be drawn up and matters can be con-

cluded. Your new cargo can hardly be delivered before then, and if I may say so, sir, your crew won't be ready. I'd estimate two hours of festivity for each man, and fourteen hours for recovery."

"Thank you," said Hoddan. "I'll see you in the morning."

He sealed up the ship when the lawyer's clerk departed. Then he felt lonely. He was the only living thing in the ship. His footsteps echoed hollowly. There was nobody to speak to. Not even anybody to threaten. He'd done a lot of threatening lately.

He went forlornly to the cabin once occupied by the liner's former skipper. His loneliness increased. He began to feel those daunting self-doubts such as plague the most unselfish and conscientious people. His actions to date, of course, did not trouble him. Today's actions were the ones which bothered his conscience. He felt that they were not quite adequate. The balance left in the lawyer's hands would not be nearly enough to cover a certain deficit which in justice he felt himself bound to make up. It had been his thought to make this enterprise self-liquidating — everybody concerned making a profit, including the owners of the ship and cargo he had pirated. But he wasn't sure.

He reflected that his grandfather would not have been disturbed about such a matter. That elderly pirate would have felt wholly at ease. It was his conviction that piracy was an essential part of the working of

the galaxy's economic system. Hoddan, indeed, could remember him saying precisely, snipping off the ends of his words as he spoke:

"I tell y', piracy's what keeps the galaxy's business thriving! Everybody knows business suffers when retail trade slacks down. It backs up the movement of inventories. They get too big. That backs up orders to the factories. They lay off men. And when men are laid off they don't have money to spend, so retail trade slacks off some more, and that backs up inventories some more, and that backs up orders to factories and makes unemployment and hurts retail trade again. It's a feed-back. See?" It was Hoddan's grandfather's custom, at this point, to stare shrewdly at each of his listeners in turn.

"But suppose somebody pirates a ship? The owners don't lose. It's insured. They order another ship built right away. Men get hired to build it and they're paid money to spend in retail trade and that moves inventories and industry picks up. More'n that, more people insure against piracy. Insurance companies hire more clerks and bookkeepers. They get more money for retail trade and to move inventories and keep factories going and get more people hired . . . Y'see? It's piracy that keeps business in this galaxy goin'!"

Hoddan had known doubts about this, but it could not be entirely wrong. He'd put a good part of the proceeds of his piracy in risk-insurance stocks, and he counted on them to make all his actions as benevolent

to everybody concerned as his intentions had been, and were. But it might not be true enough. It might be less than . . . well . . . sufficiently true in a particular instance. And therefore—

Then he saw how things could be worked out so that there could be no doubt. He began to work out the details. He drifted off to sleep in the act of composing a letter in his head to his grandfather on the pirate planet Zan.

When morning came on Krim, catawheel trucks came bringing gigantic agricultural machines of a sort that would normally never be shipped by space freight. There came

generators and turbines and tanks of plastic, and vision-tape instructors and great boxes full of tape for them. There were machine tools and cutting tips—these last in vast quantity—and very many items that the emigrants of Colin probably would not expect, and might not even recognize. The cargo holds of the liner filled.

He went to the office of his attorneys. He read and signed papers, in an atmosphere of great dignity and ethical purpose. The lawyer's clerk attended him to the police office, where seven dreary Darthians with oversized hangovers tried dismally to cheer themselves by memories of



how they got that way. He got them out and to the ship. The lawyer's clerk produced a rather weighty if small box with an air of extreme solemnity.

"The currency you wanted, sir."

"Thank you," said Hoddan. "That's the last of our business?"

"Yes, sir," said the clerk. He hesitated, and for the first time showed a trace of human curiosity. "Could I ask a question, sir, about piracy?"

"Why not?" asked Hoddan. "Go ahead."

"When you . . . ah . . . captured this ship, sir," said the clerk hopefully, "did you . . . ah . . . shoot the men and keep the women?"

Hoddan sighed.

"Much," he said regretfully, "as I hate to spoil an enlivening theory—no. These are modern days. Efficiency has invaded even the pirate business. I used my crew for floor-scrubbing and cookery."

He closed the ship port gently and went up to the control room to call the landing-grid operators. In minutes the captured liner, loaded down again, lifted toward the stars.

And all the journey back to Darth was as anticlimactic as that. There was no trouble finding the space yacht in its remote orbit. Hoddan sent out an unlocking signal, and a keyed transmitter began to send a signal on which to home. When the liner nudged alongside it, Hoddan's last contrivance operated and the yacht clung fast to the larger ship's hull. There were four days in over-

drive. There were three or four pauses for position-finding. The stop-over on Krim had cost some delay, but Hoddan arrived back at a positive sight of Darth's sun within a day or so of standard space drive direct from Walden. Then there was little or no time lost in getting into orbit with the junk yard space fleet of the emigrants. Shortly thereafter he called the leader's ship with only mild worries about possible disasters that might have happened while he was away.

"Calling the leader's ship," he said crisply. "Calling the leader's ship! This is Bron Hoddan, reporting back from Walden with a ship and machinery contributed for your use!"

The harsh voice of the bearded old leader of the emigrants seemed somehow broken when he replied. He called down blessings on Hoddan, who could use them. Then there was the matter of getting emigrants on board the new ship. They didn't know how to use the boat-blister life-boat tubes. Hoddan had to demonstrate. But shortly after there were twenty, thirty, fifty of the folk from Colin, feverishly searching the ship and incredulously reporting what they found.

"It's impossible!" said the old man. "It's impossible!"

"I wouldn't say that," said Hoddan. "It's unlikely, but it's happened. I'm only afraid it's not enough."

"It is . . . many times what we hoped," said the old man humbly. "Only—" He stopped. "We are

more grateful than we can say."

Hoddan took a deep breath.

"I'd like to take my crew back home," he explained. "And come back and . . . well . . . perhaps I can be useful explaining things. And I'd like to ask a great favor of you . . . for my own work."

"But naturally," said the old man. "Of course. We will await your return. Naturally! And . . . perhaps we can . . . we can arrange something—"

Hoddan was relieved. There did seem a slightly strange limitation to the happiness of the emigrants. They were passionately rejoiceful over the agricultural machinery. But they seemed rather dutifully than truly happy over the microfilm library. The vision-tape instructors were the objects of polite comment only. Hoddan felt a vague discomfort. There seemed to be a sort of secret desperation in the atmosphere, which they would not admit or mention. But he was coming back. Of course.

He brought the spaceboat over to the new liner. He hooked onto a lifeboat blister and his seven Darthians crawled through the lifeboat tube. Hoddan pulled away quickly before somebody thought to ask why there were no lifeboats in the places so plainly made for them.

He headed downward when the landmarks on Darth's surface told him that Don Loris' castle would shortly come over the horizon. He was just touching atmosphere when it did. The boat's rocket-tanks had been refilled, and he burned fuel recklessly to make a dramatic landing

within a hundred yards of the battlements where Fani had once thoughtfully had a coil of rope ready for him.

Heads peered at the lifeboat over those same battlements now, but the gate was closed. It stayed closed. There was somehow an atmosphere of suspicion amounting to enmity. Hoddan felt unwelcome.

"All right, boys," he said resignedly. "Out with you and to the castle. You've got your loot from the voyage"—he'd counted out for each of them rather more actual cash than any of them really believed in—"and I want you to take this box to Don Loris. It's a gift from me. And I want to—consult with him about cooperation between the two of us in . . . ah . . . some plans I have. Ask if I may come and talk to him."

His seven former spearmen tumbled out. They marched gleefully to the castle gate. Hoddan saw them tantalizingly displaying large sums in cash to the watchers above them. Thal held up the box for Don Loris. It was the box the lawyer's clerk had turned over to him, with a tidy sum in cash in it. The sum was partly depleted, now. Hoddan had paid off his involuntary crew with it—had paid them, in fact, as if they'd done the fighting they'd expected and he'd thought would be necessary. But there was still more in it than Don Loris would have gotten from Walden for selling him out.

The castle gate opened, as if grudgingly. The seven went in. With the box.

Time passed. Much time. Hoddan went over the arguments he meant to use on Don Loris. He needed to make up a very great sum, and it could be done thus-and-so, but thus-and-so required occasional piratical raids, which called for pirate crews, and if Don Loris would encourage his retainers— He could have gone to another Darthian chieftain, of course, but he knew what kind of scoundrel Don Loris was. He'd have to find out about another man.

Nearly an hour elapsed before the castle gate opened again. Two files of spearmen marched out. There were eight men with a sergeant in command. Hoddan did not recognize any of them. They came to the spaceboat. The sergeant formally presented an official message. Don Loris would admit Bron Hoddan to his presence, to hear what he had to say.

Hoddan felt excessively uncomfortable. Waiting, he'd thought about that secret despair in the emigrant fleet. He worried about it. He was concerned because Don Loris had not welcomed him with cordiality, now that he'd brought back his retainers in good working order. In a sudden gloomy premonition, he checked his stun-pistols. They needed charging. He managed it from the lifeboat unit.

He went forebodingly toward the castle with the eight spearmen surrounding him as cops had once surrounded him on Walden. He did not like to be reminded of it. He frowned to himself as he went in the castle

gate, and along a long stone passage, and up stone stairs into the great hall of state. Don Loris, as once before, sat peevishly by the huge fireplace. This time he was almost inside it, with its hood and mantel actually over his head. The Lady Fani sat there with him.

Don Loris seemed to put aside his peevishness only a little to greet Hoddan.

"My dear fellow," he said complainingly, "I don't like to welcome you with reproaches, but do you know that when you absconded with that spaceboat, you made a mortal enemy for me? It's a fact! My neighbor, on whose land the boat descended, was deeply hurt. He considered it his property. He had summoned his retainers for a fight over it when I heard of his resentment and partly soothed him with apologies and presents. But he still considers that I should return it to him, whenever you appear here with it!"

"Oh," said Hoddan. "That's too bad."

Things looked ominous. The Lady Fani looked at him strangely. As if she tried to tell him something without speaking it. She looked as if she had wept lately.

"To be sure," said Don Loris fretfully, "you gave me a very pretty present just now. But my retainers tell me that you came back with a ship. A very fine ship. What became of it? The landing-grid has been repaired at last and you could have landed it. What happened to it?"

"I gave it away," said Hoddan.

He saw what Fani was trying to tell him. One corridor . . . no, two . . . leading toward the great hall was filled with spearmen. His tone turned sardonic. "I gave it to a poor old man."

Don Loris shook his head.

"That's not right, Hoddan! That fleet overhead, now. If they are pirates and want some of my men for crews, they should come to me! I don't take kindly to the idea of your kidnaping my men and carrying them off on piratical excursions! They must be profitable! But if you can afford to give me presents like that, and be so lavish with my retainers . . . why I don't see why—"

Hoddan grimaced.

"I came to arrange a deal on that order," he observed.

"I don't think I like it," said Don Loris peevishly. "I prefer to deal with people direct. I'll arrange about the landing-grid, and for a regular recruiting service which I will conduct, of course. But you . . . you are irresponsible! I wish you well, but when you carry my men off for pirates, and make my neighbors into my enemies, and infect my daughter with strange notions and the government of a friendly planet asks me in so many words not to shelter you any longer . . . why that's the end, Hoddan. So with great regret—"

"The regret is mine," said Hoddan. Thoughtfully, he aimed a stun-pistol at a slowly opening door. He pulled the trigger. Yells followed its humming, because not everybody it hit was knocked out. Nor did it hit

everybody in the corridor. Men came surging out of one door, and then two, to require the attention of his weapons.

Then a spear went past Hoddan's face and missed him only by inches. It buried its point in the floor. A whirling knife spun past his nose. He glanced up. There were balconies all around the great hall, and men popped up from behind the railings and threw things at him. They popped down out of sight instantly. There was no rhythm involved. He could not anticipate their rising, nor shoot them through the balcony front. And more men infiltrated the hall, getting behind heavy chairs and tables, to push toward him behind them as shovable shields. More spears and knives flew.

"Bron!" cried the Lady Fani, throatily.

He thought she had an exit for him. He sprang to her side.

"I . . . I didn't want you to come," she wept.

There was a singular pause in the clangings and clashings of weapons on the floor. For a second the noises continued. Then they stopped. Then one man popped up and hurled a knife. The clang of its fall was a very lonely one. Don Loris fairly howled at him.

"Idiot! Think of the Lady Fani!"

The Lady Fani suddenly smiled tremulously.

"Wonderful!" she said. "They don't dare do anything while you're as close to me as this!"

"Do you suppose," asked Hoddan, "I could count on that?"

"I'm certain of it!" said Fani. "And I think you'd better."

"Then, excuse me," said Hoddan with great politeness.

He swung her up and over his shoulder. With a stun-pistol in his free hand he headed down the hall.

"Outside," she said zestfully. "Get out the side door and turn left, and nobody can jump down on your neck. Then left again to the gate."

He obeyed. Now and again he got in a pot-shot with his pistol. Don Loris had turned the castle into a very pretty trap. The Lady Fani said plaintively:

"This is terribly undignified, and I can't see where we're going. Where are we now?"

"Almost at the gate," panted Hoddan. "At it, now." He swung out of the massive entrance to Don Loris' stronghold. "I can put you down now."

"I wouldn't," said the Lady Fani. "In spite of the end of me that's uppermost, I think you'd better make for the spaceboat exactly as we are."

Again Hoddan obeyed, racing across the open ground. Howls of fury followed him. It was evidently the opinion of the castle that the Lady Fani was to be abducted in the place of the seven returned spearmen.

Hoddan, breathing hard, reached the spaceboat. He put Fani down and said anxiously:

"You're all right? I'm very much in your debt! I was in a spot!" Then he nodded toward the castle. "They

are upset, aren't they? They must think I mean to kidnap you."

The Lady Fani beamed.

"It would be terrible if you did," she said hopefully. "I couldn't do a thing to stop you! And a successful public abduction's a legal marriage, on Darth! Wouldn't it be terrible?"

Hoddan mopped his face and patted her reassuringly on the shoulder.

"Don't worry!" he said warmly. "You just got me out of an awful fix! You're my friend! And anyhow I'm going to marry a girl on Walden, named Nedda. Good-by, Fani! Keep clear of the rocket blast."

He went into the boatport, turned to beam paternally back at her, and shut the port behind him. Seconds later the spaceboat took off. It left behind clouds of rocket smoke.

And, though Hoddan hadn't the faintest idea of it, it left behind the maddest girl in several solar systems.

X

It is the custom of all men, everywhere, to be obtuse where women are concerned. Hoddan went skyward in the spaceboat with feelings of warm gratitude toward the Lady Fani. He had not the slightest inkling that she, who had twice spoiled her father's skulduggery so far as it affected him, felt any but the friendliest of feelings toward him. He remembered that he had kept her from the necessity of adjusting to matrimony with the Lord Ghek. It did not occur to him that most girls intend to adjust to marriage with somebody, anyhow,

and he did not even suspect that it is a feminine instinct to make a highly dramatic and romantic production of their marriage so they'll have something to be sentimental about in later years.

As Hoddan drove on up and up, the sky became deep purple and then black velvet set with flecks of fire. He was relieved by the welcome he'd received earlier today from the emigrants, but he remained slightly puzzled by a very faint impression of desperation remaining. He felt very virtuous on the whole, however, and his plans for the future were specific. He'd already composed a letter to his grandfather, which he'd ask the emigrant fleet to deliver. He had another letter in his mind—a form letter, practically a public-relations circular—which he hoped to whip into shape before the emigrants got too anxious to be on their way. He considered that he needed to earn a little more of their gratitude so he could make everything come out even; self-liquidated; everybody satisfied and happy but himself.

For himself he anticipated only the deep satisfaction of accomplishment. He'd wanted to do great things since he was a small boy, and in electronics since his adolescence, when he'd found textbooks in the libraries of looted spaceships. He'd gone to Walden in the hope of achievement. There, of course, he failed because in a free economy industrialists consider that freedom is the privilege to be stupid without penalty. In other than free economies, of course, stu-

pidity is held to be the duty of administrators. But Hoddan now believed himself in the fascinating situation of having knowledge and abilities which were needed by people who knew their need.

It was only when he'd made contact with the fleet, and was in the act of maneuvering toward a boat-blister on the liner he'd brought back, that doubts again assailed him. He had done a few things—accomplished a little. He'd devised a broadcast-power receptor and a microwave projector and he'd turned a Lawlor drive into a ball-lightning projector and worked out a few little things like that. But the first had been invented before by somebody in the Cetis cluster, and the second could have been made by anybody and the third was standard practice on Zan. He still had to do something significant.

When he made fast to the liner and crawled through the boat-tube to its hull, he was in a state of doubt which passed very well for modesty.

The bearded old man received him in the skipper's quarters, which Hoddan himself had occupied for a few days. He looked very weary. He seemed to have aged, in hours.

"We grow more astounded by the minute," he told Hoddan heavily, "by what you have brought us. Ten shiploads like this and we would be better equipped than we believed ourselves in the beginning. It looks as if some thousands of us will now be able to survive our colonization of the planet Thetis."

Hoddan gaped at him. The old man put his hand on Hoddan's shoulder.

"We are grateful," he said with a pathetic attempt at warmth. "Please do not doubt that! It is only that . . . that— You had to accept what was given for our use. But I cannot help wishing very desperately that . . . that instead of unfamiliar tools for metal-working and machines with tapes which show pictures, . . . I wish that even one more jungle-plow had been included!"

Hoddan's jaw dropped. The people of Colin wanted planet-subduing machinery. They wanted it so badly that they did not want anything else. They could not even see that anything else had any value at all. Most of them could only look forward to starvation when the ship supplies were exhausted, because not enough ground could be broken and cultivated early enough to grow food enough in time.

"Would it," asked the old man desperately, "be possible to exchange these useless machines for others that will be useful?"

"L—let me talk to your mechanics, sir," said Hoddan unhappily. "Maybe something can be done."

He restrained himself from tearing his hair as he went to where mechanics of the fleet looked over their treasure-trove. He'd come up to the fleet again to gloat and do great things for people who needed him and knew it. But he faced the hopelessness of people to whom his utmost

effort seemed mockery because it was so far from being enough.

He gathered together the men who'd tried to keep the fleet's ships in working order during their flight. They were competent men, of course. They were resolute. But now they had given up hope. Hoddan began to lecture them. They needed machines. He hadn't brought the machines they wanted, perhaps, but he'd brought the machines to make them with. Here were automatic shapers, turret lathes, dicers. Here were cutting-points for machines these machines could make, to make the machines the colony on Thetis would require. He'd brought these because they had the raw material. They had their ships themselves! Even some of the junk they carried in crates was good metal, merely worn out in its present form. They could make anything they needed with what he'd brought them. For example, he'd show them how to make . . . say . . . a lumber saw.

He showed them how to make a lumber saw—slender, rapierlike revolving tool with which a man stabbed a tree and cut outward with the speed of a knife cutting hot butter. And one could mount it so—and cut out planks and beams for temporary bridges and such constructions.

They watched, baffled. They gave no sign of hope. They did not want lumber saws. They wanted jungle-breaking machinery.

"I've brought you everything!" he insisted. "You've got a civilization, compact, on this ship! You've got

life instead of starvation! Look at this. I make a water pump to irrigate your fields!"

Before their eyes he turned out an irrigation pump on an automatic shaper. He showed them that the shaper went on, by itself, making other pumps without further instructions than the by-hand control of the tools that formed the first.

The mechanics stirred uneasily. They had watched without comprehension: Now they listened without enthusiasm. Their eyes were like those of children who watch marvels without comprehension.

He made a sledge whose runners slid on air between themselves and whatever object would otherwise have touched them. It was practically frictionless. He made a machine to make nails—utterly simple. He made a power hammer which hummed and pushed nails into any object that needed to be nailed. He made—

He stopped abruptly, and sat down with his head in his hands. The people of the fleet faced so overwhelming a catastrophe that they could not see into it. They could only experience it. As their leader would have been unable to answer questions about the fleet's predicament before he'd poured out the tale in the form it had taken in his mind, now these mechanics were unable to see ahead. They were paralyzed by the completeness of the disaster before them. They could live until the supplies of the fleet gave out. They could not grow fresh supplies without jungle-

breaking machinery. They had to have jungle-breaking machinery. They could not imagine wanting anything less than jungle-breaking machinery—

Hoddan raised his head. The mechanics looked dully at him.

"You men do maintenance?" he asked. "You repair things when they wear out on the ships? Have you run out of some materials you need for repairs?"

After a long time a tired-looking man said slowly:

"On the ship I come from, we're having trouble. Our hydroponic garden keeps the air fresh, o'course. But the water-circulation pipes are gone. Rusted through. We haven't got any pipe to fix them with. We have to keep the water moving with buckets."

Hoddan got up. He looked about him. He hadn't brought hydroponic-garden pipe supplies! And there was no raw material. He took a pair of power snips and cut away a section of cargo space wall-lining. He cut it into strips. He asked the diameter of the pipe. Before their eyes he made pipe—spirally wound around a mandril and line-welded to solidity.

"I need some of that on my ship," said another man.

The bearded man said heavily:

"We'll make some and send it to the ships that need it."

"No," said Hoddan. "We'll send the tools to make it. We can make the tools here. There must be other kinds of repairs that can't be made. With the machines I've brought, we'll make the tools to make the re-



pairs. Picture-tape machines have reels that show exactly how to do it."

It was a new idea. The mechanics had other and immediate problems beside the over-all disaster of the fleet. Pumps that did not work. Motors that heated up. They could envision the meeting of those problems, and they could envision the obtaining of jungle-plows. But they could not imagine anything in between. They were capable of learning how to make tools for repairs.

Hoddan taught them. In one day there were five ships being brought into better operating condition—for ultimate futility—because of what he'd brought. Two days. Three. Mechanics began to come to the liner. Those who'd learned first pompously passed on what they knew. On the

fourth day somebody began to use a vision-tape machine to get information on a fine point in welding. On the fifth day there were lines of men waiting to use them.

On the sixth day a mechanic on what had been a luxury passenger liner on the other side of the galaxy—but it was scores of years ago—asked to talk to Hoddan by space-phone. He'd been working feverishly at the minor repairs he'd been unable to make for so long. To get material he pulled a crate off one of the junk machines supplied the fleet. He looked it over. He believed that if this piece were made new, and that replaced with sound metal, the machine might be usable!

Hoddan had him come to the liner which was now the flagship of the fleet. Discussion began. Shaping such

large pieces of metal—which could be taken from here or there—shaping such large pieces of metal . . . Hoddan began to draw diagrams. They were not clear. He drew more. Abruptly, he stared at what he'd outlined. Electronics . . . He saw something remarkable. If one applied a perfectly well-known bit of pure-science information that nobody bothered with— He finished the diagram and a vast, soothing satisfaction came over him.

"We've got to get out of here!" he said. "Not enough room!"

He looked about him. Insensibly, as he talked to the first man on the fleet to show imagination, other men had gathered around. They were now absorbed.

"I think," said Hoddan, "that we can make an electronic field that'll soften the cementite between the crystals of steel, without heating up anything else. If it works, we can make die-forgings and die-stampings with plastic dies! And then that useless junk you've got can be rebuilt—"

They listened gravely, nodding as he talked. They did not quite understand everything, but they had the habit of believing him now. He needed this and that in the huge cargo spaces of the ship the leader had formerly used.

"Hm-m-m," said Hoddan. "How about duplicating these machines and sending them over?"

They looked estimatingly at the tool-shop equipment. It could be made to duplicate itself—

The new machine shop, in the an-

cient ark of space, made another machine shop for another ship. In the other ship that tool shop would make another for another ship, which in turn . . .

By then Hoddan had a cold-metal die-stamper in operation. It was very large. It drew on the big ship's drive unit for power. One put a rough mass of steel in place between plastic dies. One turned on the power. For the tenth of a second—no longer—the steel was soft as putty. Then it stiffened and was warm. But in that tenth of a second it had been shaped with precision.

It took two days to duplicate the jungle-plow Hoddan had first been shown, in new sound metal. But after the first one worked triumphantly, they made forty of each part at a time and turned out jungle-plow equipment enough for the subjugation of all Thetis' forests.

There were other enterprises on hand, of course. A mechanic who stuttered horribly had an idea. He could not explain it or diagram it. So he made it. It was an electric motor very far ahead of those in the machines of Colin. Hoddan waked from a cat nap with a diagram in his head. He drew it, half-asleep, and later looked and found that his unconscious mind had designed a power-supply system which made Walden's look rather primitive—

During the first six days Hoddan did not sleep to speak of, and after that he merely cat-napped when he could. But he finally agreed with the

emigrants' leader—now no longer fierce, but fiercely triumphant—that he thought they could go on. And he would ask a favor. He propped his eyelids open with his fingers and wrote the letter to his grandfather that he'd composed in his mind in the liner on Krim. He managed to make one copy, unaddressed, of the public-relations letter that he'd worked out at the same time. He put it through a facsimile machine and managed to address each of fifty copies. Then he yawned uncontrollably.

He still yawned when he went to take leave of the leader of the people of Colin. That person regarded him with warm eyes.

"I think everything's all right," said Hoddan exhaustedly. "You've got a dozen machine shops and they are multiplying themselves, and you have got some enthusiastic mechanics, now, who're drinking in the vision-tape stuff and finding out more than they guessed there was. And they're thinking, now and then, for themselves. I think you'll make out."

The bearded man said humbly:

"I have waited until you said all was well. Will you come with us?"

"No-o-o," said Hoddan. He yawned again. "I've got my work here. There's an . . . obligation I have to meet."

"It must be very admirable work," said the old man wistfully. "I wish we had some young men like you among us."

"You have," said Hoddan. "They will be giving you trouble presently."

The old man shook his head, looking at Hoddan very affectionately indeed.

"We will deliver your letters," he said warmly. "First to Krim, and then to Walden. Then we will go on and let down your letter and gift to your grandfather on Zan. Then we will go on toward Thetis. Our mechanics will work at building machines while we are in overdrive. But also they will build new tool shops and train new mechanics, so that every so often we will need to come out of overdrive to transfer the tools and the men to new ships."

Hoddan nodded exhaustedly. This was right.

"So," said the old man contentedly, "we will simply make those transfers in orbit about the planets for which we have your letters. But you will pardon us if we only let down your letters, and do not visit those planets? We have prejudices—"

"Perfectly satisfactory," said Hoddan. "So I'll—"

"The mechanics you have trained," said the old man proudly, "have made a little ship ready for you. It is not much larger than your spaceboat, but it is fit for travel between suns, which will be convenient for your work. I hope you will accept it. There is even a tiny tool shop on it!"

Hoddan would have been more touched if he hadn't known about it. But one of the men entrusted with the job had harassedly asked him for advice. He knew what he was getting. It was the space yacht he'd used

before, refurbished and fitted with everything the emigrants could provide.

He affected great surprise and expressed unfeigned appreciation. Barely an hour later he transferred to it with the spaceboat in tow. He watched the emigrant fleet swing out to emptiness and resume its valiant journey. But it was not a hopeless journey, now. In fact, the colony on Thetis ought to start out better-equipped than most settled planets.

And he went to sleep. He'd nothing urgent to do, except allow a certain amount of time to pass before he did anything. He was exhausted. He slept the clock around, and waked and ate sluggishly, and went back to sleep again. On the whole, the cosmos did not notice the difference. Stars flamed in emptiness, and planets rotated sedately on their axes. Comets flung-out gossamer veils or retracted them, and space liners went about upon their lawful occasions. And lovers swore by stars and moons—often quite different stars and moons—and various things happened which had nothing to do with Hoddan.

But when he waked again he was rested, and he reviewed all his actions and his situation. It appeared that matters promised fairly well on the emigrant fleet now gone forever. They would remember Hoddan with affection for a year or so, and dimly after that. But settling a new world would be enthralling and important work. Nobody'd think of him at all, after a certain length of time. But he

had to think of an obligation he'd assumed on their account.

He considered his own affairs. He'd told Fani he was going to marry Nedda. The way things looked, that was no longer so probable. Of course, in a year or two, or a few years, he might be out from under the obligations he now considered due. In time even the Waldenian government would realize that death rays don't exist, and a lawyer might be able to clear things for his return to Walden. But—Nedda was a nice girl.

He frowned. That was it. She was a remarkably nice girl. But Hoddan suddenly doubted if she were a delightful one. He found himself questioning that she was exactly and perfectly what his long-cherished ambitions described. He tried to imagine spending his declining years with Nedda. He couldn't quite picture it as exciting. She did tend to be a little insipid—

Presently, gloomy and a trifle dogged about it, he brought the spaceboat around to the modernized boatport of the yacht. He got into it, leaving the yacht in orbit. He headed down toward Darth. Now that he'd rested, he had work to do which could not be neglected. To carry out that work, he needed a crew able and willing to pass for pirates for a pirate's pay. And there were innumerable castles on Darth, with quite as many shiftily noblemen, and certainly no fewer plunder-hungry Darthian gentlemen hanging around them. But

Don Loris' castle had one real advantage and one which existed only in Hoddan's mind.

Don Loris' retainers did know that Hoddan had led their companions to loot. Large loot. He'd have less trouble and more enthusiastic support from Don Loris' retainers than any other. This was true.

The illusion was that the Lady Fani was his firm personal friend with no nonsense about her. This was a very great mistake.

He landed for the fourth time outside Don Loris' castle. This time he had no booty-laden men to march to the castle and act as heralds of his presence. The spaceboat's vision-screens showed Don Loris' stronghold as immense, dark and menacing. Banners flew from its turrets, their colors bright in the ruddy light of near-sunset. The gate remained closed. For a long time there was no sign that his landing had been noted. Then there was movement on the battlements, and a figure began to descend outside the wall. It was lowered to the ground by a long rope.

It reached the ground and shook itself. It marched toward the spaceboat through the red and nearly level rays of the dying sun. Hoddan watched with a frown on his face. This wasn't a retainer of Don Loris'. It assuredly wasn't Fani. He couldn't even make out its gender until the figure was very near.

Then he looked astonished. It was his old friend Derec, arrived on DARTH a long while since in the spaceboat Hoddan had been using

ever since. Derec had been his boon companion in the days when he expected to become rich by splendid exploits in electronics. Derec was also the character who'd conscientiously told the cops on Hoddan, when they found his power-receptor sneaked into a Mid-Continent station and a stray corpse coincidentally outside.

He opened the boatport and stood in the opening. Derec had been a guest—anyhow an inhabitant—of Don Loris' castle for a good long while, now. Hoddan wondered if he considered his quarters cozy.

"'Evening, Derec," said Hoddan cordially. "You're looking well!"

"I don't feel it," said Derec dismally. "I feel like a fool in the castle yonder. And the high police official I came here with has gotten grumpy and snaps when I try to speak to him."

Hoddan said gravely:

"I'm sure the Lady Fani—"

"A tigress!" said Derec bitterly. "We don't get along."

Looking at Derec, Hoddan found himself able to understand why. Derec was the sort of friend one might make on Walden for lack of something better. He was well-meaning. He might be capable of splendid things—even heroism. But he was horribly, terribly, appallingly civilized!

"Well! Well!" said Hoddan kindly. "And what's on your mind, Derec?"

"I came," said Derec dismally, "to plead with you again, Bron. You must surrender! There's nothing else

to do! People can't have death rays, Bron! Above all, you mustn't tell the pirates how to make them!"

Hoddan was puzzled for a moment. Then he realized that Derec's information about the fleet came from the spearmen he'd brought back, loaded down with cash. Derec hadn't noticed the absence of the flashing lights at sunset—or hadn't realized that they meant the fleet was gone away.

"Hm-m-m," said Hoddan. "Why don't you think I've already done it?"

"Because they'd have killed you," said Derec. "Don Loris pointed that out. He doesn't believe you know how to make death rays. He says it's not a secret anybody would be willing for anybody else to know. But . . . you know the truth, Bron! You killed that poor man back on Walden. You've got to sacrifice yourself for humanity! You'll be treated kindly!"

Hoddan shook his head. It seemed somehow very startling for Derec to be harping on that same idea, after so many things had happened to Hoddan. But he didn't think Derec would actually expect him to yield to persuasion. There must be something else. Derec might even have nerved himself up to something quite desperate.

"What did you really come here for, Derec?"

"To beg you to—"

Then, in one instant, Derec made an hysterical gesture and Hoddan's stun-pistol hummed. A small object

left Derec's hand as his muscles convulsed from the stun-pistol bolt. It did not fly quite true. It fell a foot or so to one side of the boatport instead of inside.

It exploded luridly as Derec crumpled from the pistol bolt. There was thick, strangling smoke. Hoddan disappeared. When the thickest smoke drifted away there was nothing to be seen but Derec, lying on the ground, and thinner smoke drifting out of the still-open boatport.

Nearly half an hour later, figures came very cautiously toward the spaceboat. Thal was their leader. His expression was mournful and depressed. Other brawny retainers came uncertainly behind him. At a nod from Thal, two of them picked up Derec and carted him off toward the castle.

"I guess he got it," said Thal dismally.

He peered in. He shook his head.

"Wounded, maybe, and crawled off to die."

He peered in again and shook his head once more.

"No sign of 'im."

A spearman just behind Thal said:

"Dirty trick! I was with him to Walden, and he paid off good! A good man! Shoulda been a chieftain! Good man!"

Thal entered the spaceboat, gingerly. He wrinkled his nose at the faint smell of explosive still inside. Another man came in. Another.

"Say!" said one of them in a conspiratorial voice. "We got our share

of that loot from Walden. But he hadda share, too! What'd he do with it? He could've kept it in this boat here. We could take a quick look! What Don Loris don't know don't hurt him!"

"I'm going to find Hoddan first," said Thal, with dignity. "We don't have to carry him outside so's Don Loris knows we're looking for loot, but I'm going to find him first."

There were other men in the spaceboat now. A full dozen of them. Their spears were very much in the way.

The boat door closed quietly. Don Loris' retainers stared at each other. The locking-dogs grumbled for half a second, sealing the door tightly. Don Loris' retainers began to babble protestingly.

There was a roaring outside. The spaceboat stirred. The roaring rose to thunder. The boat lurched. It flung the spearmen into a sprawling, swearing, terrified heap at the rear end of the boat's interior.

The boat went on out to space again. In the control room Hoddan said dourly to himself:

"I'm in a rut! I've got to figure out some way to ship a pirate crew without having to kidnap them. This is getting monotonous!"

XI

There was a disturbing air which was shared by all the members of Hoddan's crew, on the way to Walden. It was not exactly reluctance, because there was self-evident enthu-

siasm over the idea of making a pirate voyage under him. So far as past enterprises were concerned, Hoddan as a leader was the answer to a Darthian gentleman's prayer. The partial looting of Ghek's castle, alone, would have made him a desirable leader. But a crew of seven, returned from space, had displayed currency which amounted to the wealth of fabled Ind. Nobody knew what Ind was, any longer, but it was a synonym for fabulous and uncountable riches. When men went off with Hoddan, they came back rich.

But nevertheless there was an uncomfortable sort of atmosphere in the renovated yacht. They'd transshipped from the spaceboat to the yacht through lifeboat tubes, and they were quite docile about it because none of them knew how to get back to ground. Hoddan left the spaceboat with a triggerable timing-signal set for use on his return. He'd done a similar thing off Krim. He drove the little yacht well out, until Darth was only a spotted ball with visible clouds and ice caps. Then he lined up for Walden, direct, and went into overdrive.

Within hours he noted the disturbing feel of things. His followers were not happy. They moped. They sat in corners and submerged themselves in misery. Large, massive men with drooping blond mustaches—ideal characters for the roles of pirates—tended to squeeze tears out of their eyes at odd moments. When the ship was twelve hours on its way, the atmosphere inside it was funereal.

The spearmen did not even gorge themselves on the food with which the yacht was stocked. And when a Darthian gentleman lost his appetite, something had to be wrong.

He called Thal into the control room.

"What's the matter with the gang?" he demanded vexedly. "They look at me as if I'd broken all their hearts! Do they want to go back?"

Thal heaved a sigh, indicating depression beside which suicidal mania would be hilarity. He said pathetically:

"We cannot go back. We cannot ever return to Darth. We are lost men, doomed to wander forever among strangers, or to float as corpses between the stars."

"What happened?" demanded Hoddan. "I'm taking you on a pirate cruise where the loot should be a lot better than last time!"

Thal wept. Hoddan astonishedly regarded his whiskery countenance, contorted with grief and dampened with tears.

"It happened at the castle," said Thal miserably. "The man Derec, from Walden, had thrown a bomb at you. You seemed to be dead. But Don Loris was not sure. He fretted, as he does. He wished to send someone to make sure. The Lady Fani said; 'I will make sure!' She called me to her and said, 'Thal, will you fight for me?' And there was Don Loris suddenly nodding beside her. So I said, 'Yes, my Lady Fani.' Then she said; 'Thank you. I am troubled by Bron Hoddan.' So what could I

do? She said the same thing to each of us, and each of us had to say that he would fight for her. To each she said that she was troubled by you. Then Don Loris sent us out to look at your body. And now we are disgraced!"

Hoddan's mouth opened and closed and opened again. He remembered this item of Darthian etiquette. If a girl asked a man if he would fight for her, and he agreed, then within a day and a night he had to fight the man she sent him to fight, or else he was disgraced. And disgrace on Darth meant that the shamed man could be plundered or killed by anybody who chose to do so, but he would be hanged by indignant authority if he resisted. It was a great deal worse than outlawry. It included scorn and contempt and opprobrium. It meant dishonor and humiliation and admitted degradation. A disgraced man was despicable in his own eyes. And Hoddan had kidnaped these men who'd been forced to engage themselves to fight him, and if they killed him they would obviously die in space, and if they didn't they'd be ashamed to stay alive. The moral tone on Darth was probably not elevated, but etiquette was a force.

Hoddan thought it over. He looked up suddenly.

"Some of them," he said wryly, "probably figure there's nothing to do but go through with it, eh?"

"Yes," said Thal dismally. "Then we will all die."

"Hm-m-m," said Hoddan. "The obligation is to fight. If you fail to kill me, that's not your fault, is it? If you're conquered, you're in the clear?"

Thal said miserably:

"True. Too true! When a man is conquered he is conquered. His conqueror may plunder him, when the matter is finished, or he can spare him, when he may never fight his conqueror again."

"Draw your knife," said Hoddan. "Come at me."

Thal bewilderedly made the gesture. Hoddan leveled a stun-pistol and said:

"Bzzz. You're conquered. You came at me with your knife, and I shot you with my stun-pistol. It's all over. Right?"

Thal gaped at him. Then he beamed. He expanded. He gloated. He frisked. He practically wagged a nonexistent tail in his exuberance. He'd been shown an out when he could see none.

"Send in the others one by one," said Hoddan. "I'll take care of them. But Thal—why did the Lady Fani want me killed?"

Thal had no idea, but he did not care. Hoddan did care. He was bewildered and inclined to be indignant. A noble friendship like theirs—A spearman came in and saluted. Hoddan went through a symbolic duel, which was plainly the way the thing would have happened in reality. Others came in and went through the same process. Two of them did not quite grasp that it was a ritual,

and he had to shoot them in the knife arm. Then he hunted in the ship's supplies for ointment for the blisters that would appear from stun-pistol bolts at such short range. As he bandaged the places, he again tried to find out why the Lady Fani had tried to get him carved up by the large-bladed knives all Darthian gentlemen wore. Nobody could enlighten him.

But the atmosphere improved remarkably. Since each theoretic fight had taken place in private, nobody was obliged to admit a compromise with etiquette. Hoddan's followers ceased to brood. They developed huge appetites. Those who had been aground on Krim told zestfully of the monstrous hangovers they'd acquired there. It appeared that Hoddan was revered for the size of the benders he enabled his followers to hang on.

But there remained the fact that the Lady Fani had tried to get him massacred. He puzzled over it. The little yacht sped through space toward Walden. He tried to think how he'd offended Fani. He could think of nothing. He set to work on a new electronic setup which would make still another modification of the Lawlor space-drive possible. In the others, groups of electronic components were cut out and others substituted in rather tricky fashion from the control board. This was trickiest of all. It required the home-made vacuum tube to burn steadily when in use. But it was a very simple idea. Lawlor drive and landing-grid force

fields were formed by not dissimilar generators, and ball-lightning force fields were in the same general family of phenomena. Suppose one made the field generator that had to be on a ship if it was to drive at all, capable of all those allied, associated, similar force fields? If a ship could make the fields that landing-grids did, it should be useful to pirates.

Hoddan's present errand was neither pure nor simple piracy, but piracy it would be. The more he considered the obligation he'd taken on himself when he helped the emigrant-fleet, the more he doubted that he could lift it without long struggle. He was preparing to carry on that struggle for a long time. He'd more or less resigned himself to the post-

ponement of his personal desires. Nedda, for example. He wasn't quite sure— Perhaps, after all—

But time passed, and he finished his electronic job. He came out of overdrive and made his observations and corrected his course. Finally, there came a moment when the fiery ball which was Walden's sun shone brightly in the vision plates. It writhed and spun in the vast silence of emptiness.

Hoddan drove to a point still above the five-diameter limit of Walden. He interestedly switched on the control which made his drive-unit manufacture landing-grid-type force fields. He groped for Walden, and felt the peculiar rigidity of the ship



when the field took hold somewhere underground. He made an adjustment, and felt the ship respond. Instead of pulling a ship to ground, in the setup he'd made, the new fields pulled the ground toward the ship. When he reversed the adjustment, instead of pushing the ship away to empty space, the new field pushed the planet.

There was no practical difference, of course. The effect was simply that the space yacht now carried its own landing-grid. It could descend anywhere and ascend from anywhere without using rockets. Moreover, it could hover without using power.

Hoddan was pleased. He took the yacht down to a bare four-hundred-mile altitude. He stopped it there. It was highly satisfactory. He made quite certain that everything worked as it should. Then he made a call on the space communicator.

"Calling ground," said Hoddan. "Calling ground. Pirate ship calling ground!"

He waited for an answer. Now he'd find out the result of very much effort and planning. He was apprehensive, of course. There was much responsibility on his shoulders. There was the liner he'd captured and looted and given to the emigrants. There were his followers on the yacht, now enthusiastically sharpening their two-foot knife blades in expectation of loot. He owed these people something. For an instant he thought of the Lady Fani and wondered how he could make reparation to her for whatever had hurt her feelings so

she'd try to get his throat cut.

A whining, bitterly unhappy voice came to him.

"*Pirate ship!*" said the voice plaintively, "*we received the fleet's warning. Please state where you intend to descend, and we will take measures to prevent disorder. Repeat, please state where you intend to descend and we will take measures to prevent disorder—*"

Hoddan drew a sharp breath of relief. He named a spot—a high-income residential small city some forty miles from the planetary capital. He set his controls for a very gradual descent. He went out to where his followers made grisly zinging noises where they honed their knives.

"We'll land," said Hoddan sternly, "in about three-quarters of an hour. You will go ashore and loot in parties of not less than three! Thal, you will be ship guard and receive the plunder and make sure that nobody from Walden gets on board. You will not waste time committing atrocities on the population!"

He went back to the control room. He turned to general-communication bands and listened to the broadcasts down below.

"*Special Emergency Bulletin!*" boomed a voice. "*Pirates are landing in the city of Ensfield, forty miles from Walden City. The population is instructed to evacuate immediately, leaving all action to the police. Repeat! The population will evacuate Ensfield, leaving all action to the police. Take nothing with you. Take*

nothing with you. Leave at once."

Hoddan nodded approvingly. The voice boomed again:

"Special Emergency Bulletin! Pirates are landing . . . evacuate . . . take nothing with you . . . Leave at once . . ."

He turned to another channel. An excited voice barked:

" . . . Seems to be only the one pirate ship, which has been located hovering in an unknown manner over Ensfield. We are rushing camera crews to the spot and will try to give on-the-spot as-it-happens coverage of the landing of pirates on Walden, their looting of the city of Ensfield, and the traffic jams inevitable in the departure of the citizens before the pirate ship touches ground. For background information on this the most exciting event in planetary history, I take you to our editorial rooms." Another voice took over instantly. *"It will be remembered that some days since the gigantic pirate fleet then overhead sent down a communication to the planetary government, warning that single ships would appear to loot and giving notice that any resistance—"*

Hoddan felt a contented, heart-warming glow. The emigrant fleet had most faithfully carried out its leader's promise to let down a letter from space while in orbit around Walden. The emigrants, of course, did not know the contents of the letter. They would not send anybody down to ground, because of the temptations to sin in societies other than

their own. Blithely, and cheerfully, and dutifully, they would give the appearance of monstrous piratical strength. They would awe Walden thoroughly. And then they'd go on, faithfully leaving similar letters and similar impressions on Krim, and Lohala, and Tralee, and Famagusta, and throughout the Coalsack stars until the stock of addressed missives ran out. They would perform this kindly act out of gratitude to Hoddan.

And every planet they visited would be left with the impression that the fleet overhead was that of bloodthirsty space-marauders who would presently send single ships to collect loot—which must be yielded without resistance. Such looting expeditions were to be looked for regularly and must be submitted to under penalty of unthinkable retribution from the monster fleet of space.

Now, as the yacht descended on Walden, it represented that mythical but impressive piratical empire of Hoddan's contrivance. He listened with genuine pleasure to the broadcasts. When low enough, he even picked up the pictures of highways thronged with fugitives from the to-be-looted town. He saw Waldenian police directing the traffic of flight. He saw other traffic heading toward the city. Walden was the most highly civilized planet in the Nurmi Cluster, and its citizens had had no worries at all except about tranquilizers to enable them to stand it. When something genuinely exciting turned up, they wanted to be there to see it.

The yacht descended below the clouds. Hoddan turned on an emergency flare to make a landing by. Sitting in the control room he saw his own ship as the broadcast cameras picked it up and relayed it to millions of homes. He was impressed. It was a glaring eye of fierce light, descending deliberately with a dark and mysterious spacecraft behind it. He heard the chattered on-the-spot news accounts of the happening. He saw the people who had not left Ensfield joined by avid visitors. He saw all of them held back by police, who frantically shepherded them away from the area in which the pirates should begin their horrid work.

Hoddan even watched pleasurably from his control room as the broadcast cameras daringly showed the actual touch-down of the ship; the dramatic slow opening of its entrance port: the appearance of authentic pirates in the opening, armed to the teeth, bristling ferociously, glaring about them at the here-silent, here-deserted streets of the city left to their mercy.

It was a splendid broadcast. Hoddan would have liked to stay and watch all of it. But he had work to do. He had to supervise the pirate raid.

It was, as it turned out, simple enough. Looting parties of three pirates each moved skulking about, seeking plunder. Quaking cameramen dared to ask them, in shaking voices, to pose for the news cameras. It was a request no Darthian gentle-

man, even in an act of piracy, could possibly refuse. They posed, making pictures of malignant ruffianism.

Commentators, adding informed comment to delectably thrilling pictures, observed that the pirates wore Darthian costume, but observed crisply that this did not mean that Darth as an entity had turned pirate, but only that some of her citizens had joined the pirate fleet.

The camera crews then asked apologetically if they would permit themselves to be broadcast in the act of looting. Growling savagely for their public, and occasionally adding even a fiendish "Ha!" they obliged. The camera crews helped pick out good places to loot for the sake of good pictures. The pirates co-operated in fine dramatic style. Millions watching vision sets all over the planet shivered in delicious horror as the pirates went about their nefarious enterprise.

Presently the press of onlookers could not be held back by the police. They surrounded the pirates. Some, greatly daring, asked for autographs. Girls watched them with round, frightened, fascinated eyes. Younger men found it vastly thrilling to carry burdens of loot back to the pirate ship for them. Thal complained hoarsely that the ship was getting overloaded. Hoddan ordered greater discrimination, but his pirates by this time were in the position of directors rather than looters themselves. Romantic Waldenian admirers smashed windows and brought them treasure, for the reward of a scowling acceptance.

Hoddan had to call it off. The pirate ship was loaded. It was then the center of an agitated, excited, enthusiastic crowd. He called back his men. One party of three did not return. He took two others and fought his way through the mob. He found the trio backed against a wall while hysterically adoring girls struggled to seize scraps of their garments for mementos of real, live pirates looting a Waldenian town!

But Hoddan got them back to the ship, in confusion tending toward the blushful. Their clothes were shreds. He fought a way clear for them to get into the ship. He fought his way in. Cheers rose from the on-lookers. He got the landing port shut only by the help of police who kept pirate fans from having their fingers caught in its closing.

Then the piratical space yacht rose swiftly toward the stars.

An hour later there was barely any diminution of the excitement inside the ship. Darthian gentlemen all, Hoddan's followers still gazed and gloated over the plunder tucked everywhere. It crowded the living quarters. It threatened to interfere with the astrogation of the ship. Hoddan came out of the control room and was annoyed.

"Break it up!" he snapped. "Pack that stuff away somewhere! What do you think this is?"

Thal gazed at him abstractedly, not quite able to tear his mind and thoughts from this completely unimaginable mass of plunder. Then intelligence came into his eyes—as

much as could appear there. He grinned suddenly. He slapped his thigh.

"Boys!" he gurgled. "He don't know what we got for him!"

One man looked up. Two. They beamed. They got to their feet, dripping jewelry. Thal went ponderously to one of the two owners' staterooms the yacht contained. At the door he turned, expansively.

"She came to the port," he said exuberantly, "and said we were wearin' clothes like they wore on Darth. Did we come from there? I said we did. Then she said did we know somebody named Bron Hoddan on Darth? And I said we did and if she'd step inside the ship she'd meet you. And here she is!"

He unfastened the stateroom door, which had been barred from without. He opened it. He looked in, and grabbed, and pulled at something. Hoddan went sick with apprehension. He groaned as the something inside the stateroom sobbed and yielded.

Thal brought Nedda out into the saloon of the yacht. Her nose and eyes were red from terrified weeping. She gazed about her in purest despairing horror. She did not see Hoddan for a moment. Her eyes were filled with the brawny, mustachioed piratical figures who were Darthian gentlemen and who grinned at her in what she took for evil gloating.

She wailed.

Hoddan swallowed, with much difficulty, and said sickly:

"It's all right, Nedda. It was a

mistake. Nothing will happen to you. You're quite"—and he knew with desperate certainty that it was true—"safe with me!"

And she was.

XII

Hoddan stopped off at Krim, by landing-grid, to consult his lawyers. He felt a certain amount of hope of good results from his raid on Walden, but he was desperate about Nedda. Once she was confident of her safety under his protection, she took over the operation of the space-ship. She displayed an overwhelming saccharinity that was appalling. She was sweetness and light among criminals who respectfully did not harm her, and she sweetened and lightened the atmosphere of the space yacht until Hoddan's followers were close to mutiny.

"It ain't that I mind her being a nice girl," one of his mustachioed Darthians explained almost tearfully to Hoddan, "but she wants to make a nice girl out of me!"

Hoddan, himself, cringed from her society. He could gladly have put her ashore on Krim with ample funds to return to Walden. But she was prettily, reproachfully helpless. If he did put her ashore, she would confide her kidnaping and the lovely behavior of the pirates until nobody would believe in them any more—which would be fatal.

He went to his lawyers, brooding. The news astounded him. The emigrant fleet had appeared over Krim

on the way to Walden. Before it appeared, Hoddan's affairs had been prosperous enough. Right after his previous visit, news had come of the daring piratical raid which captured a ship off Walden. This was the liner Hoddan'd brought in to Krim. All merchants and ship owners immediately insured all vessels and goods in space transit at much higher valuations. The risk-insurance stocks bought on Hoddan's account had multiplied in value. Obeying his instructions, his lawyers had sold them out and held a pleasing fortune in trust for Hoddan.

Then came the fleet over Krim, with its letter threatening planetary destruction if resistance was offered to single ships which would land and loot later on. It seemed that all commerce was at the mercy of space marauders. Risk-insurance companies had undertaken to indemnify the owners of ships and freight in emptiness. Now that an unprecedented pirate fleet ranged and doubtless ravaged the skyways, the insurance companies ought to go bankrupt. Owners of stock in them dumped it at any price to get rid of it. In accordance with Hoddan's instructions, though, his lawyers had faithfully if distastefully bought it in. To use up the funds available, they had to buy up not only all the stock of all the risk-insurance companies of Krim, but all stock in all off-planet companies owned by investors on Krim.

Then time passed, and ships in space arrived unmolested in port. Cargoes were delivered intact. In-

surers observed that the risk-insurance companies had not collapsed and could still pay off if necessary. They continued their insurance. Risk companies appeared financially sound once more. They had more business than ever, and no more claims than usual. Suddenly their stocks went up—or rather, what people were willing to pay for them went up, because Hoddan had forbidden the sale of any stock after the pirate fleet appeared.

Now he asked hopefully if he could reimburse the owners of the ship he'd captured off Walden. He could. Could he pay them even the profit they'd have made between the loss of their ship and the arrival of a replacement? He could. Could he pay off the shippers of Rigellian furs and jewelry from the Cetis stars, and the owners of the bulk *melacynth* that had brought so good a price on Krim? He could. In fact, he had. The insurance companies he now owned lock, stock, and barrel had already paid the claims on the ship and its cargo, and it would be rather officious to add to that reimbursement.

Hoddan was abruptly appalled. He insisted on a bonus being paid, regardless, which his lawyers had some trouble finding a legal fiction to fit. Then he brooded over his position. He wasn't a business man. He hadn't expected to make out so well. He'd thought to have to labor for years, perhaps, to make good the injury he'd done the ship owners and merchants in order to help the emigrants from Colin. But it was all done, and

here he was with a fortune and the framework of a burgeoning financial empire. He didn't like it.

Gloomily, he explained matters to his attorneys. They pointed out that he had a duty, an obligation, from the nature of his unexpected success. If he let things go, now, the currently thriving business of risk insurance would return to its former unimportance. His companies had taken on extra help. More bookkeepers and accountants worked for him this week than last. More mail clerks, secretaries, janitors and scrubwomen. Even more vice presidents! He would administer a serious blow to the economy of Krim if he caused a slackening of employment by letting his companies go to pot. A slackening of employment would cause a drop in retail trade, an increase in inventories, a depression in industry . . .

Hoddan thought gloomily of his grandfather. He'd written to the old gentleman and the emigrant fleet would have delivered the letter. He couldn't disappoint his grandfather!

He morbidly accepted his attorneys' advice, and they arranged immediately to take over the forty-first as well as the forty-second and -third floors of the building their offices were in. Commerce would march on.

And Hoddan headed for Darth. He had to return his crew, and there was something else. Several something elses. He arrived in that solar-system and put his yacht in a search-orbit, listening for the call-signal the

spaceboat should give for him to home on. He found it, deep within the gravity-field of Darth. He maneuvered to come alongside, and there was blinding light everywhere. Alarms rang. Lights went out. Instruments registered impossibilities, the rockets fired crazily, and the whole ship reeled. Then a voice roared out of the communicator:

"Stand and deliver! Surrender and y'll be allowed to go to ground. But if y'ven hesitate I'll bull ye and heave ye out to space without a space-suit!"

Hoddan winced. Stray sparks had flown about everywhere inside the space yacht. A ball-lightning bolt, even of only warning size, makes things uncomfortable when it strikes. Hoddan's fingers tingled as if they'd been asleep. He threw on the transmitter switch and said annoyedly:

"Hello, grandfather. This is Bron. Have you been waiting for me long?"

He heard his grandfather swear disgustedly. Not long later, a badly battered, blackened, scuffed old spacecraft came rolling up on rocket-impulse and stopped with a billowing of rocket fumes. Hoddan threw a switch and used the landing-grid field he'd used on Walden in another fashion. The ships came together with fine precision, lifeboat-tube to lifeboat-tube. He heard his grandfather swear in amazement.

"That's a little trick I worked out, grandfather," said Hoddan into the transmitter. "Come aboard. I'll pass it on."

His grandfather presently appeared, scowling and suspicious. His eyes shrewdly examined everything, including the loot tucked in every available space. He snorted.

"All honestly come by," said Hoddan morbidly. "It seems I've got a license to steal. I'm not sure what to do with it."

His grandfather stared at a placard on the wall. It said archly: "*Remember! A Lady is Present!*" Nedda had put it up.

"Hm-m-m!" said his grandfather. "What's a woman doing on a pirate ship? That's what your letter talked about!"

"They get on," said Hoddan, wincing, "like mice. You've had mice on a ship, haven't you? Come in the control room and I'll explain."

He did explain, up to the point where his arrangements to pay back for a ship and cargo he'd given away turned into a runaway success, and now he was responsible for the employment of innumerable bookkeepers and clerks and such in the insurance companies he'd come to own. There was also the fact that as the emigrant fleet went on, some fifty more planets in all would require the attention of pirate ships from time to time, or there would be disillusionment and injury to the economic system.

"Organization," said his grandfather, "does wonders for a tender conscience like you've got. What else?"

Hoddan explained the matter of his Darthian crew. Don Loris might

affect to consider them disgraced because they hadn't cut his throat. Hoddan had to take care of the matter. And there was Nedda . . . Fani came into the story somehow, too. Hoddan's grandfather grunted, at the end.

"We'll go down and talk to this Don Loris," he said pugnaciously. "I've dealt with his kind before. While we're down, your Cousin Oliver'll take a look at this new grid-field job. We'll put it on my ship. Hm-m-m—how about the time down below? Never land long after day-break. Early in the morning, people ain't at their best."

Hoddan looked at Darth, rotating deliberately below him.

"It's not too late, sir," he said. "Will you follow me down?"

His grandfather nodded briskly, took another comprehensive look at the loot from Walden, and crawled back through the tube to his own ship.

So it was not too long after dawn, in that time-zone, when a sentry on the battlements of Don Loris' castle felt a shadow over his head. He jumped a foot and stared upward. Then his hair stood up on end and almost threw his steel helmet off. He stared, unable to move a muscle.

There was a ship above him. It was not a large ship, but he could not judge of such matters. It was not supported by rockets. It should have been falling horribly to smash him under its weight. It wasn't. Instead, it floated on with very fine precision,

like a ship being landed by grid, and settled delicately to the ground some fifty yards from the base of the castle wall.

Immediately thereafter there was a muttering roar. It grew to a howl—a bellow; it became thunder. It increased from that to a noise so stupendous that it ceased altogether to be heard, and was only felt as a deep-toned battering at one's chest. When it ended there was a second ship resting in the middle of a very large scorched place close by the first.

Neither of these ships was a space-boat. The silently landed vessel, which was the smaller of the two, was several times the sizes of the only spacecraft ever seen on Darth outside the spaceport. Its design was somehow suggestive of a yacht. The other, larger, ship was blunt and soiled and space-worn, with patches on its plating here and there.

A landing ramp dropped down from the battered craft. It neatly spanned the scorched and still-smoking patch of soil. A port opened. Men came out, following a jaunty small figure with belligerent gray whiskers. They dragged an enigmatic object behind them.

Hoddan came out of the yacht. His grandfather said waspishly:

"This the castle?"

He waved at the massive pile of cut gray stone, with walls twenty feet thick and sixty high.

"Yes, sir," said Hoddan.

"Hm-m-m," snorted his grandfather. "Looks flimsy to me!" He

waved his hand again. "You remember your cousins."

Familiar, matter-of-fact nods came from the men of the battered ship. Hoddan hadn't seen any of them for years, but they were his kin. They wore commonplace, workaday garments, but carried weapons slung negligently over their shoulders. They dragged the cryptic object behind them without particular formation or apparent discipline, but somehow they looked capable.

Hoddan and his grandfather strolled to the castle gate, their companions a little to their rear. They came to the gate. Nothing happened. Nobody challenged. There was the feel of peevish refusal to associate with

persons who landed in spaceships.

"Shall we hail?" asked Hoddan.

"Nah!" snorted his grandfather. "I know his kind! Make him make the advances." He waved to his descendants. "Open it up."

Somebody casually pulled back a cover and reached in and threw switches.

"Found a power broadcast unit," grunted Hoddan's grandfather, "on a ship we took. Hooked it to the ship's space-drive. When y'can't use the space-drive, you still got power. Your Cousin Oliver whipped this thing up to use it."

The enigmatic object made a spiteful noise. The castle gate shuddered and fell halfway from its hinges.



The thing made a second noise. Stones splintered and began to collapse. Hoddan admired. Three more unpleasing but not violently loud sounds. Half the wall on either side of the gate was rubble, collapsing partly inside and partly outside the castle's proper boundary.

Figures began to wave hysterically from the battlements. Hoddan's grandfather yawned slightly.

"I always like to talk to people," he observed, "when they're worryin' about what I'm likely to do to them, instead of what maybe they can do to me."

Figures appeared on the ground level. They'd come out of a sally port to one side. They were even extravagantly cordial when Hoddan's grandfather admitted that it might be convenient to talk over his business inside the castle, where there would be an easy-chair to sit in.

Presently they sat beside the fireplace in the great hall. Don Loris, jittering, shivered next to Hoddan's grandfather. The Lady Fani appeared, icy-cold and defiant. She walked with frigid dignity to a place beside her father. Hoddan's grandfather regarded her with a wicked, estimating gaze.

"Not bad!" he said brightly. "Not bad at all!" Then he turned to Hoddan. "Those retainers coming?"

"On the way," said Hoddan. He was not happy. The Lady Fani had passed her eyes over him exactly as if he did not exist.

There was a murmurous noise. The

dozen spearmen came marching into the great hall. They carried loot. It dripped on the floor and they blandly ignored such things as stray golden coins rolling off away from them. Stay-at-home inhabitants of the castle gazed at them in joyous wonderment.

Nedda came with them. The Lady Fani made a very slight, almost imperceptible movement. Hoddan said desperately:

"Fani, I know you hate me, though I can't guess why. But here's a thing that . . . has to be taken care of! We made a raid on Walden . . . that's where the loot came from . . . and my men kidnaped this girl . . . her name is Nedda . . . and brought her on the ship as a present to me . . . because she'd admitted that she knew me! Nedda's in an awful fix, Fani! She's alone and friendless, and . . . somebody has to take care of her! Her father'll come for her eventually, no doubt, but somebody's got to take care of her in the meantime, and I can't do it!" Hoddan felt hysterical at the bare idea. "I can't!"

The Lady Fani looked at Nedda. And Nedda wore the brave look of a girl so determinedly sweet that nobody could possibly bear it.

"I'm . . . very sorry," said Nedda bravely, "that I've been the cause of poor Bron turning pirate and getting into such dreadful trouble. I cry over it every night before I go to sleep. He treated me as if I were his sister, and the other men were so gentle and respectful that I . . . I think it will break my heart when they are punish-

ed. When I think of them being executed with all that dreadful, hopeless formality—"

"On DARTH," said the Lady Fani practically, "we're not very formal about such things. Just cutting somebody's throat is usually enough. But he treated you like a sister, did he? Thal?"

Thal swallowed. He'd been beaming a moment before, with his arms full of silver plate, jewelry, laces, and other bits of booty from the town of Ensfield. But now he said desperately:

"Yes, Lady Fani. But not the way I'd've treated my sister. My sisters, Lady Fani, bit me when they were little, slapped me when they were bigger, and scorned me when I grew up. I'm fond of 'em! But if one of my sisters'd ever lectured me because I wasn't refined, or shook a finger at me because I wasn't gentlemanly—Lady Fani, I'd've strangled her!"

There was a certain gleam in the Lady Fani's eye as she said warmly to Hoddan:

"Of course I'll take care of the poor thing! I'll let her sleep with my maids and I'm sure one of them can spare clothes for her to wear, and I'll take care of her until a space liner comes along and she can be shipped back to her family. And you can come to see her whenever you please, to make sure she's all right!"

Hoddan's eyes tended to grow wild. His grandfather cleared his throat loudly. Hoddan said doggedly:

"You, Fani, asked each of my men

if they'd fight for you. They said yes. You sent them to cut my throat. They didn't. But they're not disgraced! I want that clear! They're good men! They're not disgraced for failing to assassinate me!"

"Of course they aren't," conceded the Lady Fani sweetly. "Whoever heard of such a thing?"

Hoddan wiped his forehead. Don Loris opened his mouth fretfully. Hoddan's grandfather forestalled him.

"You've heard about that big pirate fleet that's been floating around these parts? Eh? It's my grandson's. I run a squadron of it for him. Wonderful boy, my grandson! Bloodthirsty crews on those ships, but they love that boy!"

"Very—" Don Loris caught his breath. "Very interesting."

"He likes your men," confided Hoddan's grandfather. "Used them twice. Says they make nice, well-behaved pirates. He's going to give them stun-pistols and cannon like the one that smashed your gate. Only men on DARTH with guns like that! Seize the spaceport and put in power broadcast, and make sure nobody else gets stun-weapons. Run the country. Your men'll love it. Love that boy, too! Follow him anywhere. Loot."

Don Loris quivered. It was horribly plausible. He'd had the scheme of the only stun-weapon-armed force on DARTH, himself. He knew his men tended to revere Hoddan because of the plunder his followers seemed always to acquire. Don Loris was in a

very, very uncomfortable situation. Bored men from the battered spacecraft stood about his great hall. They were unimpressed. He knew that they, at least, were casually sure that they could bring his castle down about his ears in minutes if they chose.

"But . . . if my men—" Don Loris quavered. "What about me?"

"Minor problem," said Hoddan's grandfather blandly. "The usual thing would be *psst!* Cut your throat." He rose. "Decide that later, no doubt. Yes Bron?"

"I've brought back my men," growled Hoddan, "and Nedda's taken care of. We're through here."

He headed abruptly for the great hall's farthest door. His grandfather followed him briskly, and the negligent, matter-of-fact armed men who were mostly Hoddan's first and second cousins came after them. Outside the castle, Hoddan said angrily:

"Why did you tell such a preposterous story, grandfather?"

"It's not preposterous," said his grandfather. "'Sounds like fun, to me! You're tired now, Bron. Lots of responsibilities and such. Take a rest. You and your Cousin Oliver get together and fix those new gadgets on my ship. I'll take the other boys for a run over to this spaceport town. The boys need a run ashore, and there might be some loot. Your grandmother's fond of homespun. I'll try to pick some up for her."

Hoddan shrugged. His grandfather was a law unto himself. Hoddan saw his cousins bringing horses

from the castle stables, and a very casual group went riding away as if on a pleasure excursion. As a matter of fact, it was. Thal guided them.

For the rest of that morning and part of the afternoon Hoddan and his Cousin Oliver worked at the battered ship's Lawlor drive. Hoddan was pleased with his cousin's respect for his device. He unfeignedly admired the cannon his cousin had designed. Presently they reminisced about their childhood. It was pleasant to renew family ties like this.

The riders came back about sunset. There were extra horses, with loads. There were cheerful shoutings. His grandfather came into Hoddan's ship.

"Brought back some company," he said. "Spaceliner landed while we were there. Friend of yours on it. Congenial fellow, Bron. Thinks well of you, too!"

A large figure followed his grandfather in. A large figure with snow-white hair. The amiable and relaxed Interstellar Ambassador to Walden.

"Hard-gaited horses, Hoddan," he said wryly. "I want a chair and a drink. I traveled a good many light-years to see you, and it wasn't necessary after all. I've been talking to your grandfather."

"Glad to see you, sir," said Hoddan reservedly.

His Cousin Oliver brought glasses, and the Ambassador buried his nose in his and said in satisfaction:

"A-a-ah! That's good! Capable man, your grandfather. I watched

him loot that town. Beautifully professional job! He got some homespun sheets for your grandmother. But about you."

Hoddan sat down. His grandfather puffed and was silent. His cousins effaced themselves. The Ambassador waved a hand.

"I started here," he observed, "because it looked to me like you were running wild. That spacefleet, now . . . I know something of your ability. I thought you'd contrived some way to fake it. I knew there couldn't be such a fleet. Not really! That was a sound job you did with the emigrants, by the way. Most praiseworthy! And the point was that if you ran hogwild with a faked fleet, sooner or later the Space Patrol would have to cut you down to size. And you were doing much too good work to be stopped!"

Hoddan blinked.

"Satisfaction," said the Ambassador, "is well enough. But satiety is death. Walden was dying on its feet. Nobody could imagine a greater satisfaction than curling up with a good tranquilizer! You've ended that! I left Walden the day after your Ensfield raid. Young men were already trying to grow mustaches. The textile mills were making colored felt for garments. Jewelers were turning out stun-gun pins for ornaments, Darthian knives for brooches, and the song writers had eight new tunes on the air about pirate lovers, pirate queens, and dark ships that roam the lanes of night. Three new vision-play series were to start that same night

with space-piracy as their theme, and one of them claimed to be based on your life. Better make them pay for that, Hoddan! In short, Walden had rediscovered the pleasure to be had by taking pains to make a fool of one's self. People who watched that raid on vision-screens had thrills they'd never swap for tranquilizers! And the ones who actually mixed in with the pirate raiders— You deserve well of the republic, Hoddan!"

Hoddan said, "Hm-m-m," because there was nothing else to be said.

"Now, your grandfather and I have canvassed the situation thoroughly! This good work must be continued. Diplomatic Service has been worried all along the line. Now we've something to work up. Your grandfather will expand his facilities and snatch ships, land and loot, and keep piracy flying. Your job is to carry on the insurance business. The ships that will be snatched will be your ships, of course. No interference with legitimate commerce. The landing-raids will be paid for by the interplanetary piracy-risk insurance companies—you. In time you'll probably have to get writers to do scripts for them, but not right away. You'll continue to get rich, but there's no harm in that so long as you re-introduce romance and adventure and derring-do to a galaxy headed for decline. Savages will not invent themselves if there are plenty of heroic characters—of your making!—to slap them down!"

Hoddan said painfully:

"I like working on electronic gad-

gets. My cousin Oliver and I have some things we want to work on together."

His grandfather snorted. One of the cousins came in from outside the yacht. Thal followed him, glowing. He'd reported the looting of the spaceport town, and Don Loris had gone into a tantrum of despair because nobody seemed able to make headway against these strangers. Now he'd turned about and issued a belated invitation to Hoddan and his grandfather and their guest the Interstellar Ambassador — of whom he'd learned from Thal—to dinner at the castle. They could bring their own guards.

Hoddan would have refused, but the Ambassador and his grandfather were insistent. Ultimately he found himself seated drearily at a long table in a stone-walled room lighted by very smoky torches. Don Loris, jittering, displayed a sort of professional conversational charm. He was making an urgent effort to overcome the bad effect of past actions by conversational brilliance. The Lady Fani sat quietly with jewels at her throat. She looked most often at her plate. The talk of the oldsters became profound. They talked administration. They talked practical politics. They talked economics.

The Lady Fani looked very bored as the talk went on after the meal was over. Don Loris said brightly, to her:

"My dear we must be tedious! Young Hoddan looks uninterested,

too. Why don't you two walk on the battlements and talk about such things as persons your age find interesting?"

Hoddan rose, gloomily. The Lady Fani, with a sigh of polite resignation, rose to accompany him. The Ambassador said suddenly:

"Hoddan! I forgot to tell you! They found out what killed that man outside the power station!" When Hoddan showed no comprehension, the Ambassador explained, "The man your friend Derec thought was killed by death rays. It develops that he'd gotten a terrific load on—drunk, you know—and climbed a tree to escape the pink, purple, and green *duryas* he thought were chasing him to gore him. He climbed too high, a branch broke, and he fell and was killed. I'll take it up with the court when I get back to Walden. No reason to lock you up any more, you know. You might even sell the Power Board on using your receptor, now!"

"Thanks," said Hoddan politely. He added, "Don Loris has that Derec and a cop from Walden here now. Tell them that and they may go home."

He accompanied the Lady Fani to the battlements. The stars were very bright. They strolled. Remembering his Darthians, he felt very unpopular.

"What was that the Ambassador told you?" she asked.

He explained without zest. He added morbidly that it didn't matter. He could go back to Walden now,

and if the Ambassador was right he could even accomplish things in electronics there. But he wasn't interested. It was odd that he'd once thought such things would make him happy.

"I thought," said the Lady Fani, in gentle melancholy, "that I would be happier with you dead. You had made me very angry. No, no matter how! But I found it was not so."

Hoddan fumbled for her meaning. It wasn't quite an apology for trying to get him killed. But at least it was a disclaimer of future intentions in that direction.

"And speaking of happiness," she added in a different tone, "this Nedda . . ." He shuddered, and she said: "I talked to her. So then I sent for Ghek. We're on perfectly good terms again, you know. I introduced him to Nedda. She was vanilla ice cream with meringue and maple syrup on it. He loved it! She gazed at him with pretty sadness and told him how terrible it was of him to kidnap me. He said humbly that he'd never had her ennobling influence nor dreamed that she existed. And she loved that! They go together like strawberries and cream! I had to leave, or stop being a lady. I think I made a match."

Then she said tranquilly:

"But seriously, you ought to be perfectly happy. You've everything you ever said you wanted, except a delightful girl to marry."

Hoddan squirmed.

"We're old friends," said Fani

kindly, "and you did me a great favor once. I'll return it. I'll round up some really delightful girls for you to look over."

"I'm leaving," said Hoddan, alarmed.

"The only thing is—I don't know what type you like. Nedda isn't it."

Hoddan shuddered.

"Nor I," said Fani. "What type would you say I was?"

"Delightful," said Hoddan hoarsely.

The Lady Fani stopped and looked up at him. She said approvingly:

"I hoped that word would occur to you one day. Er . . . what does a man usually do when he discovers a girl is delightful?"

Hoddan thought it over. He started. He put his arms around her with singularly little skill. He kissed her, at first as if amazed at himself, and then with enthusiasm.

There were scraping sounds on the stone nearby. Footsteps. Don Loris appeared, gazing uncertainly about.

"Fani!" he said plaintively. "Hoddan? Our guests are going to the spaceships. I want to speak privately to Hoddan."

"Yes?" said Hoddan. Don Loris peered blindly about. He kissed Fani again.

"I've been thinking," said Don Loris fretfully. "I've made some mistakes, my dear boy, and I've given you excellent reason to dislike me, but at bottom I've always thought a great deal of you. And . . . ah . . . there seems to be only one way in which I can properly express how

much I admire you. Ah— How would you like to marry my daughter?"

Hoddan looked down at Fani. She did not try to move away.

"What do you think of the idea,

Fani?" he asked. "How about marrying me tomorrow morning?"

"Of course not!" said Fani indignantly. "I wouldn't think of such a thing! I couldn't possibly get married before tomorrow afternoon!"

THE END

IN TIMES TO COME

Next issue we begin a new three-part serial by Gordon R. Dickson—"Dorsai!"

As of now, after some six millennia of recorded history of trying, Man has not yet succeeded in working out a system of organization good enough to run one planet. We've had intercity wars; they ended when men could organize efficiently enough to make a going nation. Then, of course, we had international wars. Currently, the problem is intercontinental.

Question: What does it take to set up a going, growing, interstellar community?

I think Dickson has an answer at least worthy of consideration . . .

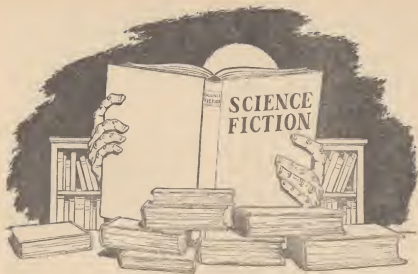
THE EDITOR.

THE ANALYTICAL LABORATORY

No room for comments this time, but the score on the January 1959 issue came out:

PLACE	STORY	AUTHOR	POINTS
1.	Study in Still Life	Eric Frank Russell	2.84
2.	Seedling	Charles V. de Vet	3.16
3.	Deadlock	Robert and Barbara Silverberg	3.20
4.	To Run the Rim	A. Bertram Chandler	3.42
5.	Robin Hood's Barn	Poul Anderson	3.82
6.	By New Hearth Fires	Gordon R. Dickson	4.13

THE EDITOR.



THE REFERENCE LIBRARY

BY P. SCHUYLER MILLER

GRIM

NEW WORLD?



FROM time to time some spokesman for science fiction makes much of our record as prognosticators—it seems a bit pretentious to say prophets, which implies that we believe the futures

we predict. Then, in a mood of artless candor, our after-dinner speaker usually admits that the record is really only pretty good where gadgets are concerned. When it comes to future *societies*, we tend to play with the permutations—not project the present.

This is a perfectly understandable foible, because the kind of technically informed and imaginative writers who turn out our best SF—here in

Astounding, at least—are people who can foresee the possibilities in our present technology, the direction in which it is heading, and what the consequences may be. It's a lot harder and chancier to predict what Man will do with and to himself, except in very broad generalities. And if you're going to have to be broad anyway, it's certainly more entertaining to go over into satire or hyperbole, and concoct a distorted burlesque of some element in our world which just might dominate a future society. So we have "Space Merchants." So we have "1984." So we have "Brave New World."

Of course, when a writer of the caliber of George Orwell or Aldous Huxley uses the medium of extrapolation, he isn't always fooling. I don't know whether Orwell believed that Big Brother would, by 1984, dominate the Earth; he's seen him running Germany, and was watching him in Russia, so it wasn't too great a reach to imagine him in England. I do know that Aldous Huxley had his tongue in his cheek as to detail, but not as to threat. He tells us as much in "Brave New World Revisited" (Harper & Brothers, New York; 1958; 147 pp.; \$3.00).

Twenty-six years after "Brave New World" was published, Huxley sees the world he envisioned taking shape faster than he expected. His novel was set in the seventh century After Ford, but society—as it always has—has outpaced him.

Basic to the regimented world Huxley pictured, he points out, was

the Malthusian reality that population increases faster than the food supply and the concomitant resources that make it available—technology and distribution. For a sober, factual documentation of our situation and our potential in this respect, he refers us to a book published in 1957, "The Next Hundred Years," by Harrison Brown, James Bonner and John Weir of California Institute of Technology (Viking Press, N. Y.; 193 pp.; \$3.95). This is a collection of facts, figures, and serious extrapolations put together for a group of top American industrialists, and in its closing chapters it goes a bit beyond Huxley.

The elements in our society which Huxley warned us might run wild were, to quote the opening paragraph of his new book: "The completely organized society, the scientific caste system, the abolition of free will by methodical conditioning, the servitude made acceptable by regular doses of chemically induced happiness (the "soma" of the novel), the orthodoxies drummed in by nightly courses of sleep-teaching." The novel, he points out, was written in 1931, in the bottom of the world-wide Depression, in a society of too little order; it envisioned a world of too much order—but Huxley felt that world would not come in his time or his grandchildren's. It has come, twice—in Nazi Germany, and now in Soviet Russia—and he warns us that it can come and seems to be coming to us.

The pressure for regimentation

comes, Huxley warns, from the mushroom expansion of population, especially in those parts of the world that are least fitted to match it with productive increases. This is well documented in the early chapters of the book by the three Cal. Tech. scientists. In the time of Christ the world had about two hundred fifty million people—fewer than China has now. By 1620, when New England got its start, the world's population had doubled. In another three hundred years, give or take a few, it had reached two billion—and in the last twenty-seven years, it has added another eight hundred thousand. Why has the acceleration been so great in our time? Civilization: penicillin—DDT—clean water.

The coming age will not be the Space Age, Huxley warns: if we had the engineering and the fuel to make daily trips to Venus and Mars tomorrow, it would do nothing to relieve the overcrowding of the Earth in the Age of Overpopulation. And to cope with this unleashed expansion, any government must plan, must impose restrictions, must increasingly regiment its people so that they can be treated as orderly statistics. In the Communist sector of the world, we may get a "1984"—in 1984. In the West, we may have Huxley's "brave new world" a half-century after Ford.

This is not intended to be a capsule abstract of Huxley's book. He argues simply, and from facts; perhaps not with infallible logic. He

spells out the operations of propaganda under dictatorship, and shows how our own society uses the same techniques in "soft" and "hard" selling. He shows how Russia has employed Pavlov's discoveries about conditioning in the techniques of brainwashing, "a hybrid technique . . . the tradition of '1984' on its way to becoming the tradition of 'Brave New World.'"

In his latter chapters, Huxley is less convincing. He is talking about chemical persuasion, and the discovery of drugs that regulate and modulate the mind as did the "soma" of his book. Granted that a ruthless government now has the chemical means to pacify the population, I suspect we're farther from a climate in which it would do so than Huxley thinks. Subliminal persuasion, which had a brief flurry of alarmed reaction about the time he was writing this book, turned out to be disappointingly ineffective to the advertisers who might misuse it. Evidently it requires a fixity of attention that no medium of communication—even TV—can get in our society. Sleep-teaching has also been tried, but is not as effective as he seems to think.

"The Next Hundred Years" goes on from here. It concludes that the only solution to the problem of overpopulation is an accelerating technology which keeps several jumps ahead, so that when we need to use the uranium in ordinary rock, because our coal, oil, and rich ores are gone, we can afford to do so, so that when we have to eat algae and yeasts, they

will be there to eat (Communist China seems to have learned this lesson, to an extent that alarms its Russian mentors).

In their final chapter the three California scientists sound a warning that Harrison Brown has also emphasized in his earlier book, "The Challenge of Man's Future." The kind of highly organized — Huxley says "over-organized"—society that goes with the future world they predict is terribly vulnerable to unbalance. War could bring it down to subsistence agriculture not far above the neolithic level—when Man first learned to exploit the Earth. Failure of the supply of DDT and antibiotics could loose epidemics that would sweep half the world.

Science fiction could come true. But it needn't, if we recognize the dangers, avoid them, and study ourselves as we have studied chemistry and physics. Or will this study of Man be used, for the sake of smoothness and harmony, to control Man as Huxley fears?

* * *

Back to the present, and to a pair of off-trail items that have come my way and may interest some of you.

I know that there are by this time numerous records, such as the sound track for "Destination Moon"—or even "The Purple People Eater"—that have created a subdivision in SF collecting. I've had, for some time, the Audio Rarities disk of Orson Welles' famous broadcast of H. G. Wells' "War of the Worlds"

(LPA #2355—\$5.95). It's a horribly low-fi disk that sounds as if it was recorded off the air by someone, during the broadcast. The extraneous station breaks, commercials, et cetera have been edited out, but it's difficult to see what spooked New Jersey.

Now I've had another kind of documentary album for the rocket fans: Vox Productions' "Rockets, Missiles and Space Travel" (PL 11.120 — probably \$4.98, Sam Goody's Pittsburgh outlet says: the publisher gave me no price). In it you hear, from Cape Canaveral and White Sands, the count-down and take-off of several of our principal rockets—an Atlas, to begin the first side, and Jupiter C with the Explorer, to close the second, together with a Snark, Corporal, Honest John, V-2, and another Jupiter. With these you get a series of short interviews in which Willy Ley discusses questions of fact and opinion with a number of the men at the top of our rocket program, as well as the pilots and technicians who send them up. You'll hear von Braun, Dornberger, and Krafft Ehrlicke of the German rocket squad, and our own military leaders as well. (Not all of the men interviewed are identified in the album notes, incidentally, and not all are listed in the "count-down" for the record.)

It is planned that this album, or others, will carry on the story of our conquest of space through as many editions as Willy Ley's classic book. It might have started with the "beep-

ing" of Sputnik I, caught on the little 45 rpm disk which was on the news-stands for a short time in 1957, in a factual leaflet called simply "The Earth Satellite." It may one day carry the first message, in Russian, English, French, Brazilian or Chinese, of the first man to stand on the Moon.

Some time before I received another record from a poetry-writing SF fan in Denver, Colorado, Roscoe Fleming. He is a columnist for the *Denver Post* and author of a book of poetry, "The Man Who Reached the Moon" (Golden Bell Press, Denver; 1957; 125 pp.; \$3.00), many of which have science-fiction themes. Two of these poems open and close a disk of readings by Ben Hunter, a disk jockey for KFI, Los Angeles; one, "Nightwatch in the Observatory," gives the album its name: "Nightwatch." No price was given, and I could find no listing; the publisher is West Canterbury Records Co., P.O. Box 2108, Alhambra, California.

My qualifications for judging poetry are nil. In content, the two on the record—"Ant Village" and "Nightwatch"—have well known and interesting SF themes, as have their counterparts in the book. The general sentimental air seems to be on a standard newspaper level, and the rhymes and scanning seem a little rocky at times. Hunter, I notice, has done a little editing to make them read more smoothly, or the author has done it for him. I don't think these will go down in history as great poems, but people evidently enjoy

them, in the paper and on the air, and you may be interested.

A TOUCH OF STRANGE, by Theodore Sturgeon. Doubleday & Co., Garden City, N. Y. 1958. 262 pp. \$2.95

There is no other talent in science fiction quite like Sturgeon's. He has Bradbury's poetry of visualization without Bradbury's increasingly self-conscious and artificial style. He sees the inhumanity of humans, and the humanity of nonhumans—and makes us see them too. He knows the value of shock and the art of subtlety. And the nine stories in this collection, if not really his best, are all worth reading or rereading, as the case may be.

Most of the stories are reprints from recent issues of *Galaxy*. The opening one, "The Pod in the Barrier," serves up a technical problem—how to break through an unbreakable barrier—then solves it in human terms. "The Touch of Your Hand" creates the familiar yet strange culture of another world, with human relations again the victor over technology. "Mr. Costello, Hero" draws two fascinating portraits, of an interplanetary schemer and a not-too-bright ship's officer. "The Other Celia" shows us an utterly strange alien among us.

One story, that may have been written for the book, is not science fiction or fantasy, except in its picture of a nonentity driven by the compulsion to break out of his ordinary

ness and commit a great sin: "A Crime for Llewellyn."

Venture contributes three stories, two of which probably could never have been printed if anyone else had written them: "Affair With a Green Monkey" for its subtly explicit sex theme, and "The Girl Had Guts" for repulsiveness of detail. Sturgeon makes them real, compassionate, believable, though a gimmick ending detracts a little from "Guts." The third is "It Opens the Sky," with a scheming crook of a hero, all sorts of fascinating detail, and a highly moral conclusion.

Finally there's the title story, from *F&SF*, a fantasy that again is built around the things that make tormented people tick, and whose title is close to the perfect description of the elusive quality that makes Sturgeon's writing stand out. More than anyone now writing, he has that "touch of strange" that delicately tints the ordinary and makes the extraordinary familiar.

EDGE OF TIME, by David Grinnell.
Avalon Books, New York. 1958.
221 pp. \$2.75

Here is an excellent idea rather well developed, although in more skilled hands the story might also have become excellent. As it is, it is one of the best of the recent Avalon titles.

The gimmick—which has one built-in error that the author keeps nudging—is that a group of scien-

tists have succeeded in creating a universe-in-miniature on an upstate New York mountaintop. They have created a primal superatom—which would *not* be hydrogen, but some ultra-transuranium thing—which explodes into the cosmic fragments of which stars and galaxies are eventually made. All this, confined by a force field, takes place in a large room in our universe, but in its own space-time is of full galactic scale.

In this pocket galaxy the evolution of stars and planets takes place with—to the observers—lightning speed. They watch the evolution of our own universe recreated, the coming of life on various scattered planets, the evolution of intelligent races, and the rise of civilizations. By watching as these imprisoned cultures reach and pass our own level, they hope to watch a counterpart of our own far future and to reap the science of many races, through many thousands of years.

An added gimmick enables them to live in the bodies of the people of their synthetic worlds, going through generations of experience in a few days. Helping with this are a reporter and his—feminine—photographer assistant, who have tracked down the secret laboratory while following up stories of strange mirages, "escaped" from the captive universe. There are spies on the scenes, too, and a very well handled mystery within the aging galaxy, which soon discovers that its own destruction is fated as the expanding "atom" recoils into its original state.

Details are unconvincing. I can't quite swallow the scientists' putting a couple of laymen to work, when they could easily have had trained specialists sent them for the job, nor is their unconcern with the repeated evidence of espionage very believable. Still, it's a wonderful idea and I wish I could have developed it as well.

THE TOWER OF ZANID, by L. Sprague de Camp. Avalon Books, New York. 1958. 220 pp. \$2.75

This is a back-handed sequel to "The Queen of Zamba," which was serialized here back in 1949 and published by Ace as "Cosmic Manhunt" in 1954 (No. D-61, if you missed it, and paired with Clifford D. Simak's "Ring Around the Sun.") The new book ran last year as a four-parter in *Original Science Fiction*.

"Tower of Zanid" is a sequel in two somewhat technical senses: (a) it is one of the Viagens series about the planets of Tau Ceti, and Krishna in particular; and (b) its hero, the scheming English ex-radio-announcer Anthony Fallon, was the rather off-stage villain of the earlier book. Fallon is now living by his wits in Zanid, capital of the Krishnan principality of Balhib, and hoping to regain his lost kingship in Zamba.

To him come, severally, Dr. Julian Fredto, two-hundred-year-old Polish archeologist . . . Qaid of Baabal, undercover agent for the hostile empire of Qaath . . . Percy Mjipa, stiff-necked consul for the Terran World

Federation, and assorted Terran and Krishnan associates of them all, not to speak of resident aliens of various species and planets. Their common motive is for him, Fallon, to find out what is going on inside the snailshell-shaped sanctuary of the priests of Yesht, the Safq or Tower of Zanid.

By way of mayhem, homicide, larceny, bribery, and other forms of finaglement, culminating in open war between Balhib and Qaath, Fallon manages to accomplish practically all of his intertangled missions except his own. It's fun, but it would be a better book and even more fun except for the author's ingrown integrity, of which Isaac Asimov complained plaintively in his introduction to the Twayne edition of "The Continent Makers," the 1953 collection of Viagens yarns. The languages, titles and names of the various races are worked out to the last detail, with proper attention to dialect, and the resulting jawbreakers are pretty hard to remember, the translation into English is deliberately awkward-sounding, and there isn't quite enough *zing* in the book to be worth the trouble. "Rogue Queen" is still the masterpiece of the Viagens series, and one of the best books in modern SF. This isn't.

OTHER WORLDS IN SPACE, by Terry Maloney. Sterling Publishing Co., New York. 1958. 128 pp. \$2.95.

The main virtue of this book on the planets by an English—amateur?

—astronomer is in the author's paintings of the various worlds as seen from space. He's no Bonestell, but he is painting planets like Mars and Jupiter as he has seen them in his own telescope, and the result is rather far removed from the common, over-gaudy space cover on a SF magazine—even this one. A Mercator projection of Mars is included.

The book, I'd say, has been photographed and printed by offset lithography from proofs or even pages of the English edition of 1957. A page on amateur astronomical societies and a chapter on satellites have been tacked on to bring it up to date . . . the weight of the type is different, as usually happens when you add to offset negatives. The result is a good enough little book, more complete than some and with the excellent color plates . . . but it's really not needed.

43,000 YEARS LATER, by Horace Coon. Signet Books, New York. No. S-1534. 1958. 143 pp. 35¢

Where Signet finds the dogs, like this and Vernon's "The Space Frontiers," I can't imagine. Granted that utopian novels are apt to lack story values, in direct proportion to the amount of preaching they do, it's hard to see why a paper-back publisher with a very distinguished line of other books should expect to make money from one like this.

So far as story goes, this describes

the explorations of an expedition from "the Great Galaxy"—which later seems to be just a small planet—on an Earth whose life was destroyed in an atomic war, some time in the 1960s. Zolgus, specialty not clear, heads the expedition; his philosophy is that a good, tough dictatorship gets things done and keeps people in their places. Yundi is an anthropologist, and middle-of-the-road tolerant. Xia, the one woman, is a biologist with a leaning toward the arts and religion.

To give the author some due, he does begin to show the distortions in the picture of twentieth century Earth, produced by these three points of view. But the shortcomings outweigh the art, and I suspect they reflect holes in the author's own scientific knowledge, which seems to involve some late-nineteenth century arguments.

It seems odd to me that scientists from forty-three thousand years hence, supposedly far advanced beyond our own race, should believe that H-bombs produce poisonous gases—distinct from the fall-out—that will wipe out all life on the planet. It is absurd for them to believe that life could have re-evolved to the insect level in forty-three thousand years, and that it would produce a new humanity in another million years. Even in their first explorations, they should not have picked up the bizarre idea that the Aztec religion is two hundred thousand years old, or—even from Zolgus—that Earth had "hundreds" of races with indepen-

dent biological origins. This last concept did, of course, have its vogue around the turn of the century, and I am afraid they represent the author's own ideas of science.

Whoever wrote the blurb for the back cover, by the way, seems to have read the only two or three pages in the book on which the three explorers are talking together. Maybe the sentences in quotations marks are all blurb-writers can read . . .

MORE REPRINTS

ESPER, by James Blish. Avon Books, No. T-268. 1958. 190 pp. 35¢

This was originally "Jack of Eagles," and a very good story with more entertainment value, if less of the stuff of "serious" fiction, than Blish has been using lately. To use an expression I applied to the author several months ago, this was a book in which his reach and his grasp went hand-in-hand.

DESTINATION INFINITY, by Henry Kuttner. Avon Books, No. T-275. 1958. 192 pp. 35¢

Another title change. This is Kuttner's "Fury," published here as a short serial by "Lawrence O'Donnell" in 1947, and until now available only in a Grossett & Dunlap edition. It was, is, and will continue to be a wonderful action-adventure yarn of an immortal among the submarine bubble-cities of Venus.

RACE TO THE STARS, edited by Leo Margulies and Oscar J. Friend. Crest Books, No. S-245. 1958. 224 pp. 35¢

Four novelettes from the 1954 "Giant Anthology of Science Fiction," which had ten stories in it. These date from 1940 to 1949, and include one of Leigh Brackett's lush Venusian adventure tales, "Enchantress of Venus," retitled "The City of the Lost Ones," Edmond Hamilton's "Forgotten World," Robert Heinlein's memorable "By His Bootstraps," now called "The Time Gate," and a minor Jack Williamson, "The Sun Maker." Old-fashioned, maybe, but quite enjoyable.

ON THE BEACH, by Nevil Shute. Signet Books, No. D-1562. 1958. 238 pp. 50¢

The best-selling novel of a world dying from fall-out, which to me is too unimpassioned and well-bred to be believable.

6 FROM WORLDS BEYOND, edited by T. E. Dikty. Crest Books, N. Y. No. S-258. 1958. 160 pp. 35¢

Six of the thirteen stories in the next to the last Dikty anthology, which was by far from his best. The best of these is the much reprinted "Game of Rat and Dragon," by Cordwainer Smith. The others: "Jungle Doctor," by Robert F. Young; "Dream Street," by Frank M. Robinson; "You Created Us," by Tom Godwin; "I Do Not Love, Three, Doctor Fell," by Robert Bloch; and

"The Shores of Night," by Thomas N. Scortia, much expanded from the original "Sea Change" published here in 1956.

V-2, by Walter Dornberger. Ballantine Books, N. Y. No. F-273-K. 237 pp. 50¢

General Dornberger headed the German V-2 project, and his book is a fascinating account of the way Nazi politics and inter-service rivalry did more than Allied Intelligence to cripple the rocket program.

THE BIG EYE, by Max Ehrlich. Bantam Books, N. Y. No. A-1860. 181 pp. 35¢

A very so-so novel with which Doubleday tried to climb on the supposed SF band wagon, back in 1949. Since then, Doubleday has very nearly *been* the band wagon, but only the critics who knew nothing about science fiction found this very exciting.

NEW TALES OF SPACE AND TIME, edited by Raymond J. Healy. Pocket Books, Inc., New York. Cardinal Editions, No. C-319. 1958. 273 pp. 35¢

I suppose my justification for listing this again—the original paperback was out in 1952, and this is just a new edition with a handsome new

cover—is that I'm in it. When Ray Healy commissioned the collection for Holt, the year before, the gimmick was ten brand-new stories by ten authors on ten SF themes. The two that make the book memorable are Kris Neville's "Bettyann" and Anthony Boucher's "The Quest for Saint Aquin." Also present: Asimov, Bradbury, Bretnor, Cartmill, Fenton and Petracca, Heard, and van Vogt.

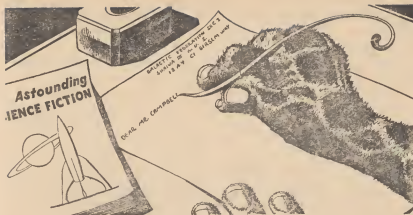
CRY HORROR, by H. P. Lovecraft. Avon Books, N. Y. No. T-284. 191 pp. 35¢

Another re-issue with a new title (it was "The Lurking Fear" in the 1947 Avon edition). The eleven stories are some of Lovecraft's better — and better-known — weird-horror tales, and include his one very good SF story, "The Colour Out of Space."

THE WINDS OF TIME, by Chad Oliver. Pocket Books, N. Y. No. 1222. 1958. 153 pp. 25¢

Yep, there are still twenty-five-cent SF pocket-books that are better than thirty-five-cent pb's. Fifteen thousand years ago a shipload of extraterrestrials were wrecked on Earth—a planet where there was no civilization high enough to build them a new ship. So they decided to sleep until Man was ready to help them . . .

THE END



BRASS TACKS

Dear Mr. Campbell:

There is a logical explanation of the operation of the Hieronymus machine and the divining rod, Ouija boards, et cetera to be found in the dynamics of physiologic processes in the brain.

Review type articles describing the processes in question are to be found in the *Scientific American* in the articles listed below.

"The Physiology of Imagination,"
September, 1958, page 135.

"Celestial Navigation by Birds," August, 1958, page 42.

"The Cerebellum," page 84.

There are cortical patterns in the brain that mirror all our sensory and feeling or emotional experiences. In operation, we acquire a learned pattern to correspond to each experience that consists of a pattern of cortical activity relating all the sensory and other experiences together, or, a memory is established of a class of experiences.

The 10,000,000,000 neurons in the brain are formed into a sheet of gray matter .1 inch thick and 400 square inches in area, which forms the deeply folded surface of the two great hemispheres of the brain. Because of the great number of neurons involved in each experience replication in the electrical network of the brain in action (brainwaves) it is necessary to use the same neuron(s) for several different memories by changing the direction of the signal spatially, or in time sequence. Each neuron has an Axon that forms its output connection to the next neuron. Some neurons have axons that connect to other areas of the brain, or even to the other side of the brain. Since another area of the brain is mirroring another sensory experience we may feel or hear sensations or sounds not connected to the outside sensory experience being encountered by our sensing or working organs. Normally this cross coupling is blanked out before reaching consciousness. Many psionic phenomena fall into this category.

The experience of James Lev in his letter to Brass Tacks in the November, 1958 issue is an excellent example. In James Lev's experiment with the Hieronymus machine, each of several people got specific reactions that were all different, while some got no reaction.

In the electrical network of the brain this meant that as the experience pattern was played out electrically, cross coupling occurred at a specific point in the brain corre-

sponding to a particular spot on the dial of the machine. Needless to say, since this represented a learned pattern, it could be repeated. We can even identify the particular cross coupling that occurred. In James Lev, cross coupling to the brain area for mirroring heat sensations from the sensory nerve network occurred at two points in the brain corresponding to two points in the electrical analogue of turning the dial in the brain. In his sister the cross coupling occurred to the hearing area of the brain. Those who obtain no response to the machine have no cross coupling to feeling areas of the brain that can be admitted to consciousness. They are typical cold intellectual types.

Ouija boards and divining rods can be explained in the same manner. Here, a cortical pattern exists that mirrors a spatial pattern in the outside world, such as a location. This pattern is too complicated to be admitted to consciousness, except through cross coupling to a feeling area—perhaps the pleasure center in the brain—and you know through feeling that it is right, and, in this case, the cross coupling occurs directly to the area of the brain controlling muscles. A good example of this is to be found in celestial navigation of birds in the reference. Here the bird will turn in relation to a pattern of stars to fly in the right direction, without a conscious thought. Because of the complexity of the pattern, an error in recognition may occur part of the time.

However, it is only necessary to refine the cortical pattern enough to have a large percentage of the responses to the external pattern correct. Experts in the use of the divining rod are those in whom the cross coupling occurs directly to the muscles, thereby excluding intellectual types.

Electronics is a key to many more similar phenomena, provided that we use the electronics of the brain in question to provide the explanation. —Robert F. Edwards, 4811 Marlona Drive, Rolling Hills, California.

Fine—but how does the information concerning the location of buried pipes get to the brain to stimulate these areas? What perceptive mechanism is involved in detecting that external world pattern?

Dear Mr. Campbell:

Mr. P. S. Miller exposes the fatal weakness of biased reporting when he takes a would-be example of the "sincere, serious school of UFO study," and observes, "We are told, in abstract, or capsule, or paraphrased form, what *Major Keyhoe* says the witnesses saw" (*Reference Library*, December). This incisive objection is sustained by a bit of information gained about three years ago. In his book, *The Flying Saucer Conspiracy* (p. 31), Keyhoe declares "a giant ship had been sighted over California four nights in a row," a "huge saucer" that "had raced past Moro Rock in Sequoia-Kings National Park, its

brilliant yellow glow lighting a nearby canyon." He reports that "Park Superintendent E. T. Scoyen saw an enormous UFO zoom into the sky"; adding that, "On the next three nights other park officials saw the huge machine—or a similar one—as it streaked over the area"—et cetera, et cetera.

On inquiry, Mr. Scoyen (now Associate Director, National Park Service of the United States Department of the Interior) answered me in considerable detail with quotations from what he describes as "my official report." According to this account, he (not being alone) saw "a sudden and brilliant flash of yellow light" moving "in front of Moro Rock," followed in a few seconds by "a large ball of fire" (also of "a brilliant yellow color") rising from the canyon floor. This experience was repeated the next day. The witness states, "I have always said that they were *not* flying saucers; also that they were flashes and not objects" (letter of February 29, 1956). The "huge saucer" and "huge machine" of Mr. Keyhoe's description appear to be products of his own vivid imagination, his own preconceived ideas presented in his book to take the place of the witness' own missing testimony!

Centuries ago, Anglo-Saxon jurisprudence established courts of law in which a witness' testimony could be heard in words of his own choosing from his own mouth, for the simple reason that nothing is so easily misrepresented, misquoted, mangled or

murdered as the testimony of a witness when it is "told in abstract, or capsule, or paraphrased form" by some critic or special pleader. The only way a reporter can protect himself from the suspicion of misrepresentation is to quote the testimony of the witnesses *in extenso, verbatim*. Instead of this, the easy way out is to hide behind a façade of "authority"—which is what the USAF investigators do for the most part when they reduce reams of testimony down to statistics for their Project Blue Book Report and other "findings." Maybe this process of reduction involves no conscious or unconscious misrepresentation and omits nothing of importance by misjudgment—although it is difficult to imagine anyone without prejudice who has not himself seen at least one UFO—but without the original testimonies we can never know. As another reviewer—and, by his own admission, not one of "the ecstatically idiotic audience of true believers"—Anthony Boucher, conjectures this month, the Air Force might well provide from its files of unpublished testimony, "the most valuable and fascinating saucer book yet." But this book is hardly a prospect. Those who accept the USAF interpretations, just as those who swallow the Keyhoe theories, are amply pleased with a statistic or a paraphrase so long as it bears the proper stamp of "authority"!—Walter A. Carrithers, jr., 463 North Second Street, Fresno 2, California.

To date, despite reams of argument

and statements, the only sure, positive statement about UFOs that can be made is, "There is a phenomenon. Its nature and cause are totally indeterminable from the data and the technical understanding available to us at this time." They might be scout ships of interstellar visitors . . . and they might be giant plasmoids of ionized gases of our own atmosphere. They are not the result of any phenomenon adequately known to modern science.

Dear Mr. Campbell:

This is a comment on your "Problem in Abstract Justice"—whether a child should be punished for playing with matches. It seems to me this ethical problem would not exist in a more ethical society; that is, it is not a necessary problem brought about by the child's unavoidable inexperience, but one conditioned by the unnecessary untruthfulness and hypocrisy characteristic of present-day—adult—society.

In contrast, I am reminded of a couple living at the edge of a deep, dangerous river, with a three-year-old son. There was no problem for these parents. They had never lied to their son, and he had never heard them lie to others. His questions had always been answered in a truthful and unevasive manner. There were no "forbidden" topics. The child had been brought up with a maximum of love and an absolute minimum of discipline, though I am sure he had a

strong sense of his parents' "rights" as well as his own. Although he was a very energetic and curious child, when his parents told this boy the river was dangerous and that he should not go near it, he trusted them and stayed away. Since they had never lied to him, ". . . the child concluded from his real experience . . ." (I quote from your Problem) that anything his parents said was true.

Having trust in his parents, his parents could have trust in him.

The average child is so accustomed to being lied to—particularly in sexual matters—that when he is warned something is dangerous he simply doesn't believe it. Moreover, an inner resentment toward a hateful, disciplinary training tends to express itself by misbehavior annoying to the parents.

Spanking in this case as in so many others seems to me merely a way of covering parental inadequacies.—Nancy Smith, 250 West 88th Street, New York City.

Suppose carrots taste delicious to his parents—but he happens to be allergic to them. Then he knows his parents lie, for they told him carrots were good. Trouble: The truth is not, in real fact, identical for all. Hence "lying" is inescapable.

Dear John:

For several years now I've been wondering about something, and

this wonderment comes up every year when your Statement of Ownership, et cetera, appears. I look at the Notary Public's serial number—this year it's 30-8158000—and I wonder . . .

Is it possible that your offices are really on Trantor, with just a "show window" in New York? I can't think of any possible place in the Universe except *possibly* Galactic Empire Capital where there would be three hundred and eight million notaries in circulation! Come on, now—'fess up!—Eugene J. Allen, San Francisco, California.

Sorry; the information you seek is classified Top Secret.

Dear Mr. Campbell:

Why not give the artists who create Astounding's superb covers a break—say, in the form of a corollary to the Analytical Laboratory whereby the readers could select the best cover of the year—or quarter.—Bobby G. Werner, 745 Eldridge Street, Orlando, Florida.

The annual Science Fiction Convention does that. Kelly Freas has a row of spaceship awards!

Dear Mr. Campbell:

Since reading Poul Anderson's excellent story, "We Have Fed Our Sea," I have been disturbed by a problem which threatens the plausibility of the whole tale. I am writing

in the hope that you may be able to find an answer for me.

The crux of the story is the fact that a certain amount of germanium needed to repair the transistors of the "caster web" is not available in the circumstances. Upon this point depend all the subsequent adventures of the crew of the *Southern Cross*. Now, I am specifically bothered by the fact that, while germanium is certainly essential to the construction of transistors, transistors are *not*, to the best of my limited knowledge, essential to the construction of electronic equipment. Would not old-fashioned vacuum tubes also have been capable of doing the job? With all the equipment and materials which the four men of the story had at their disposal, and with a ready-made vacuum around them eliminating the need for even building glass tubes, could not the four heroes have extricated themselves from their predicament without the arduous search for germanium? I find it difficult to believe that all knowledge of vacuum-tube principles would be lost, even though all their functions had been, logically, taken over by transistors.

I very much dislike the practice of picking picayune holes in an extremely fine story. At the same time, however, as you yourself have pointed out, it is necessary that a science-fiction story be completely accurate and believable in its scientific premises. In this case, I would be glad to be proven wrong, for it would greatly increase my appreciation of Mr. An-

derson's fine story.—Peter Morse, San Ysidro Ranch, Santa Barbara, California.

Most of the apparatus remained intact—and all of it was designed and built for transistors. Too, not all the capabilities of solid state devices can be matched in vacuo. Vacuum tubes can't handle 10,000 ampere currents!

Dear Mr. Campbell:

Since someone will do it eventually, I might as well be the one. This intense pre-occupation of your readers with illuminating as many Finagle Factors as possible might lead some tender young mind to the conclusion that it's a contrary universe we inhabit, indeed. It is to that yet uncynical, searching and tender young mind that I suggest the following Axiom:

ALL FINAGLE LAWS MAY BE BY-PASSED BY LEARNING THE SIMPLE ART OF DOING WITHOUT THINKING.

The following account, which can be verified by the people who served as conveyor-belts, and is thus provenly true datum, will illustrate my point:

A friend of mine visited an old couple who were distant relatives of hers. During this visit she was given an old picture, recently dug out of the attic, which the old couple suggested she might like to have, since the group-picture contained a por-

trayal of some great-great grand uncle of hers.

My friend accepted the picture graciously, but was completely disinterested. She decided to burn the old thing, then, on impulse, thought her own daughter, in New York, might get a kick out of seeing it—then let the daughter put it in the trash. So it was sent from California to New York.

The daughter received the picture. She had an acquaintance—no relation—who had just completed an historical novel, and happened to show the picture to her. The acquaintance nearly fainted from joy.

The picture of said group of men was of exactly the men she had written the historical novel around. The picture was rushed into print, and appeared to enhance the validity of said novel. She had "wished" for a photo!

I assure you Finagle must have been taking a holiday, just as he was the day my mother expressed a desire for a screwdriver that would fit certain screws on her sewing machine, and my husband picked one up by the side of the road on his way home from work. It was just the right size. Finagle napped again, and as other readers may add by their own accounts, is far from a regular tripper-upper, methinks.

Your November Editorial, "Over-compensation," clearly states the conflict of the times; that of knowing punishment is no cure for crime, yet

not being able to apply anything but punishment. Abstractly, we thus can "kick them in the teeth again," but as individuals, we know that buried in each juvenile delinquent's case history there is a pathetic tale of no love, no understanding, under-or-over control by parents, and parent delinquency. Yes, they have to be harshly disciplined for the safety of society, and yet this means further injustice individually. Some dilemma! —M. J. Wingo, Route 2, Box 695, Lakeside, California.

Those are perfect examples of Finagle's Laws—the trouble with the good doctor was that he was always a pessimist. The full statement of the First Law is, simply, that if something can happen, it will. Finagle had it: "If something can go wrong, it will," because of all possible occurrences, 99.99-999% are undesirable. Therefore, most random events are deleterious.

I disagree on the JD's; it is not repeat not—true that each has a pathetic background of no-love; just as some human individuals are born without arms, or legs, et cetera, so some are born without an ethical sense, without the ability to learn civilized behavior. In an earlier time, such people were called "incubi" or "succubi," and were held to be nonhuman. I wonder if it isn't proper to agree that such anomalies are nonhuman!

THE END

(Continued from page 7)
ing it is, then, sacrificing his energies on a valueless hallucination.

Science has, for more than a century, been operating to jam the data of psi—and thereby *has made psi in reality a valueless hallucination!*

Dr. Joseph B. Rhine is the first man in modern history to blast a path through the jamming efforts of Science—and he's done it by what might be called "multiple diversity, high-redundance transmission."

When Dr. Rhine started his work, Science knew-for-absolute-positive-certainty that psi absolutely, unequivocally, beyond any doubt whatever, was pure nonsense, superstition, and absolute rot.

Today, due to Dr. Rhine's persistence, sheer redundancy of repetition and sheer mass of experimental data, Science has been driven, against its every wish and determination, to the point of acknowledging that possibly there might be something to investigate.

If you deny absolutely that Alpha exists, then, obviously, you are not being prejudiced or biased against it when you refuse to discuss it. Obviously you can't discuss something that isn't there, can you?

So long as Science could maintain that psi didn't exist at all, it could maintain that it wasn't prejudiced against it.

Dr. Rhine has forced Science to discuss it.

But . . . notice these facts, and observe that they definitely *do* constitute *holes*—behavior wildly at odds

with the normally-to-be-expected behavior of Science, and scientists.

1. Psychologists have repeatedly maintained that Dr. Rhine's results are meaningless—not real results at all—because his statistical methods are improperly applied to the material being studied. A recent review of a book on psionic experiments, published in a psychological journal, and reviewed by a psychologist, attacked the book on that basis. The reviewer hadn't read the book with quite the attention he should have; he had neglected to notice that the book he was attacking on the basis of improper use of statistical methods had been written by the president of a British Statistical Society.

2. Psychology has continued to attack Rhine's statistical methods . . . despite the fact that the American Mathematical Association has reviewed Rhine's statistical methods and unqualifiedly approved them.

How often do you find the professional scientists of one field publicly denying the competence of the experts in an another field to judge *work in their own field*? Can you imagine the psychological groups denying the competence of the American Physical Society to judge the competence of a technique for measuring the speed of light? The persistent attacks on Rhine's statistical methods, *entirely by nonmathematicians*, is a screaming abnormality of Scientific behavior. When Einstein made some mild sociological suggestions, directly related to his nucleonics work, he was resoundingly de-

nounced for daring to speak at all in a field not his own.

Now notice an additional anomaly; the American Mathematical Association has, itself, allowed the psychologists to dare to question their authority in their own field! The psychologists would, normally, have had their ears pinned back, and tied in bowknots, for such unmitigated presumptuousness.

In Conan Doyle's "Case of the Barking Dog," Holmes states that the behavior of the dog in the night is the crucial evidence. "But," says Dr. Watson, "the dog did nothing in the night!" And that, says Holmes, is the clue; the intruding murderer must have been known and acceptable to the dog.

The remarkable behavior of the American Mathematical Association, in not barking at the presumptuous psychologists, means that their mission—disqualifying Rhine's work—must be known and acceptable to the mathematicians!

The mathematicians, of course, have said they aren't qualified to judge Rhine's experimental techniques. The psychologists have conspicuously refrained from attacking those experimental techniques; they're handicapped there, because the techniques are their own standard, approved techniques. (As his statistical techniques are the standard, approved techniques of the mathematicians, and so can't be attacked by mathematicians.) Rhine's experimental techniques have been

attacked plenty, of course . . . by physicists, chemists, anybody who isn't a psychologist who uses those techniques regularly himself.

There's another hole there; the psychologists have not risen in defense of their own techniques!

Now consider this: any intelligent entity *must* have a system of values. (Logic isn't intelligent; a logic machine is logical, but decidedly not intelligent.) There must be an ordering of values, a system of relative importances. Even lower animals show that; it's what is involved in making a choice.

And every such system must have a Highest Value, a value in defense of which all others must be sacrificed, but which cannot itself be sacrificed for any cause.

In Chess, the values system is such that, under the rules, every and all pieces may be, and must, if necessary, be sacrificed in defense of the King, but the King cannot be sacrificed under any circumstances.

Let's call a Highest Value a King-point; it's the point for which any and all other points will be sacrificed, but which cannot, itself, be sacrificed for any reason. Every intelligent entity—mouse, Man, or Martian—must have such a system, and must have King-points. (Multiple, because there are different King-points along different lines of development of the individual. But there's always a top-King-point somewhere.)

Now in defense of a King-point, a human being will sacrifice anything and everything. Life, liberty, honor,

ethics, honesty, truth—anything—and feel that his action is noble, right, and dedicated.

Spies are hated; Nathan Hale was a clumsy, unsuccessful, spy. His efforts to lie, cheat, steal, and delude were unsuccessful. Why, then, do we honor him? Because he did it in defense of a King-point we, too, hold to be a King-point.

The scientist will similarly lie, cheat, steal, seek to delude, falsify records, omit data, inject irrelevant data, suppress information, forsake honor, ethics, and every fundamental principle of Science . . . in defense of a King-point.

The King-point I don't know—but the motto seems to be "*Psionics shall not pass!*" And in support of that, Science actively suppresses, falsifies, obfuscates, and omits data. It generates holes all over the place . . . where the normally-expectable is startlingly absent.

About 1890, Eusapia Palladino achieved some remarkable performances; she levitated and displayed telekinetic power. She was examined by, among others, the Curies.

The data, although published, has been so thoroughly suppressed that no textbook of physics anywhere that I've ever heard of mentions it.

At approximately the same time—plus or minus a decade or so—Henri Becquerel found a somewhat fogged photographic plate. The Curies investigated that, too.

Now everyone knows that photographic plates are easily fogged. Not

only will light do it, but heat, chemical contamination, faulty development technique—a thousand things. Surely it's easy to explain away a fogged photographic plate!

Yet that plate led to atomic energy.

Here we have a remarkable contrast between hole and electron; the incredible dropping of the Palladino phenomena, far more spectacular in themselves, and the massive effort at developing the fogged photographic plate! Why was the plate considered more worthy of study than Palladino?

Science disposed of Palladino fairly well; her personality happened to be remarkably unpalatable. She was, beyond question, a liar, a cheat, and personally obnoxious. O.K.—so she was. And Hitler was anything but a desirable type—but anyone who says he wasn't a first-line genius, in addition to being a louse, is making a most grievous error. There are evil geniuses—but they're still geniuses.

So Palladino was a lying genius—but the genius fact remains. She had the Power.

But it's easy for Science to suppress her and the honest work of honest investigators who studied her. Call it all lies; that plugs up that leak. *Psionics shall not pass!*

Edgar Cayce was a different problem altogether. There is no evidence that Cayce was a brilliant man; the trite old phrase "poor but honest" actually seems to fit him perfectly. The evidence available seems to indicate that he was an abnormally, phenomenally ethical man. No one,

so far as I know, has ever found any evidence that Edgar Cayce, at any time, did anything that was not absolutely one hundred per cent honest, ethical, and truthful - to - the - best - of - his - understanding. And the written records of some fifteen thousand specific, detailed, and exact cases exist to prove he had the Power.

At least a dozen times, expeditions of top-rank professional scientists launched off to "expose that fraud, that charlatan . . ."

And the remarkable—the shriekingly abnormal—fact is that every single one of those expeditions, without exception, came home *and shut up!*

Imagine! Professional scientists who have gone on a field trip to explore a remarkable phenomenon, coming home . . . *and saying nothing whatever!* In the system of Science, could anything be more remarkable?

What happened? Did they find evidence that Cayce was, in fact, a fraud, and decide to bury it? Possible, of course—and it's possible, of course, that the Sun has a core of solid ice, too. After all, we've never actually examined it . . .

Did they find overwhelming evidence that Cayce did, in fact, have the ability to use clairvoyance repeatedly, and with perfect accuracy? If so, why didn't they report it?

Did they find, on examination, that Cayce was that exceedingly rare phenomenon, a truly blameless man, who literally did not lie, and against

SPECIAL OFFER

Castle...VANGUARD TO VENUS...\$1.00
Clason.....ARK OF VENUS.....\$1.50

These special offers are made to indicate the type of stock on hand. We offer:

Magazines 21,000 (1926-1959)

Books 11,000 (new and used)

Pocketbooks 3,000 (new)

Also assorted s-f items

Edgar Rice Burroughs'

TARZAN OF THE APES.....\$2.00

A PRINCESS OF MARS.....\$2.00

TARZAN'S QUEST.....\$2.00

BEYOND THIRTY

and

THE MAN-EATER

\$3.00

Small edition. Going . . .

ask for our lists

SCIENCE FICTION & FANTASY
PUBLICATIONS

127-01 116th AVENUE

S. Ozone Park 20, N. Y.

whom no charge of fraud or cheating whatever could be laid? That would have made it exceedingly difficult to disqualify any positive evidence of Cayce's real ability; in the total absence of negative evidence, positive evidence becomes extremely sticky. And . . . *psionics shall not pass!*

Sir William Crooks investigated a psi-talented man, D. D. Home. Sir William reported that, as a professional, highly-trained and highly respected experimental physicist, he was convinced Home did, in actual fact, levitate.

Science jumped on Sir William with both feet; he was denounced throughout the scientific press of the world for having the stupidity, the

temerity, to support that charlatan, Home.

None of the scientists who denounced Crooks investigated Home.

Why did the scientists who investigated Cayce come home and shut up?

Anybody want to have his scientific career shattered? Just offer solid, clear evidence that psionics does exist—in a form that is unimpeachable, positive, and not tainted by any trace of anything that can be used to blacken the evidence.

The basic command remains; *psionics shall not pass!*

It goes much deeper than Science; Science is relatively new. It stems from the older roots of our culture; "Thou shalt not suffer a witch to live!" for one. And ours is the only culture Man has ever produced that maintains that Magic is Evil, if it exists at all.

The battle to suppress psi—or magic—has been going on a long, long time. Half the older books of the Bible are almost unintelligible to ordinary modern readers—including most theologians—because they were primarily centered on damnation of magical practices. But today the nature of the magical concepts has been so thoroughly buried and ground out of memory that only a few scholars realize the purpose and point of the older Bible books. Onan, for instance, wasn't damned for practicing contraception, as is usually held—he was damned for practicing animistic magic. The Golden Calf is about the only trace of the hated, older magic

we of today can recognize in the older books, so poor is our modern knowledge of the magical concepts!

Science is the lineal descendent of a cultural tradition that hates Magic with an implacable, and unceasing violence.

Take a look at the holes; they're evidence too! And the holes spell

PSIONICS SHALL NOT PASS!

In defense of that point, Science will sacrifice honesty, truth, ethics—and top-rank scientists.

Now the real question is this: What is the Top King-point that lies hidden behind that motto?

Why must psionics—Magic—be suppressed?

Our culture, unique in suppressing Magic, is also unique in achievement. *Why?* What is the real value of that suppression of truth?

For there must be a real value; our culture would not have achieved so outstandingly if there were not.

Why has it been advantageous to operate a high-power jamming transmitter to make psi talents useless?

There's a *real* reason—and we don't know what it is.

The presence of the jamming transmitter Science maintains—the remarkable holes in its behavior—is evidence that *something* is being suppressed.

What is it we human beings mustn't know? What's the *real* information that lies behind psi? *Why* must it be suppressed?

THE EDITOR.

LET'S GET DOWN TO BRASS TACKS



You don't want to miss a single issue of *ASTOUNDING* Science Fiction . .

Don't want to miss a single article . . .

A single installment to that serial you found so interesting.

AND,

Since we don't want you to miss any issues . . .

We offer you this simple solution . . .

Subscribe Today—

For a whole year of *ASTOUNDING* Science Fiction for only
\$3.50 and let the mailman bring your copies right to the door.

To learn of the fascinating world of tomorrow, in the award-winning Science Fiction magazine, fill in the coupon below.

Fill Out and Mail Today to:

Subscription Department, *ASTOUNDING* Science Fiction
304 East 45th Street, New York 17, New York

Enter my subscription to *ASTOUNDING* Science Fiction for 12 issues at \$3.50, Saving me 70¢ compared with the newsstand rate of \$4.20 for the same 12 issues. (U. S. and Possessions and Canada only.)

I enclose ☐ Cash ☐ Check ☐ Money Order

Name _____

Address _____

City _____ Zone _____ State _____

ASF 4-5-9

GET READY FOR THE SPACE ERA! SEE THE SATELLITES... THE MOON ROCKETS



AMAZING TELESCOPE BUYS AND OTHER OPTICAL BARGAINS



... SEE THE STARS, MOON, PLANETS CLOSE UP 3" Astronomical Reflecting Telescope

Assembled and ready to use! 60- to 160-Power
An Unusual Buy — Famous Mt. Palomar Type



PHOTOGRAPHERS!
Adapt your camera to
this scope for excellent
telescope shots and fasci-
nating photos of moon!

Assembled—Ready to use! You'll see the Rings of Saturn, the fascinating planet Mars, huge craters on the Moon, Star Clusters, Moons of Jupiter in detail. Galaxies! Equatorial mount with lock on both axes. Abundant and overcoated 3" diameter high-speed f/10 mirror. Telescope comes equipped with a 60X eyepiece and a mounted Barlow Lens, giving you 60- to 160-power. An Optical Finder Telescope, always so essential is also included. Sturdy, hardwood portable tripod. Valuable STAR CHART and 272-page "Handbook of Heavens."

Stock No. 85,050-A.....\$29.95 Postpaid

GIANT MAGNETS! TERRIFIC BARGAINS!



War surplus—Alnico V type! Horseshoe shape. Tremendous lifting power. 5-lb. size. Dimensions: A—3 3/4"; B—2 3/4"; C—4 3/16"; D—1 1/4"; E—1 1/4"; F—

2 1/2". Strength is about 2,000 Gauss. Will lift over 125 lbs.

Stock No. 70,183-A.....\$8.50 Postpaid

15-lb. size. Approximately 5,000-6,000 Gauss rating. Will lift over 250 lbs.

Stock No. 85,088-A.....\$22.50 F. O. B.

Shipping wt. 22 lbs. Barrington, N. J.

WAR SURPLUS AMERICAN-MADE 7 x 50 BINOCULARS



Big savings! Brand new! Crystal clear viewing—7 power. Every optical element is coated. An excellent night glass—the size recommended for satellite viewing. Individual eye focus. Exit pupil 7mm. Approximate field at 1,000 yards is 376 feet. Carrying case included. American 7 x 50's normally cost \$195. Our war surplus price saves you real money.

Stock No. 1533-A..... only \$55.00 Postpaid

(Tax included)

INSTRUCTION BOOKLETS

	Stock No.	Postpaid
Time in Astronomy	9054-A	60c
Homebuilt Telescope	9006-A	40c
ULTRA CLOSE-UP Photography	9042-A	60c
Fun With Optics	9050-A	50c
Solar Energy & Solar Furnaces	9053-A	40c

50-150-300

POWER MICROSCOPE 3 Achromatic Objective Lenses On Revolving Turret!

Imported! The color-corrected, cemented achromatic lenses in the objectives give you far superior results to the single lenses found in the microscopes selling for \$9.95! Results are worth the difference! Fine rack and pinion focusing.

Stock No. 70,008-A.....\$14.95 Ppd.



4 1/4" REFLECTING SCOPE—Up to 270 POWER

Stock No. 85,006-A.....\$74.50

F. O. B. Barrington, New Jersey



TWO-STAGE ROCKET TOY—

Simple, safe—demonstrates principles of jet rockets. Uses water and air as fuel. First stage soars up 200 to 300 feet—then second stage is automatically released, going still higher. A second stage satellite is also included and may be substituted. Made of Butyrate plastic. Set includes fuel supply tank and air injection pump.

Stock No. 70,157-A.....\$2.98 Postpaid

Close Out! Mechanical Drawing Set



Regular Price \$18.00

Our Price Only
\$6.00 Ppd.

American mfr. could not compete with foreign imports—thus you get a terrific bargain, even far below import prices. 10 handsome pieces in velvet-lined case. Nickel plated brass—precision American-made. We guarantee you'll be satisfied or money refunded.

Stock No. 50,200-A.....\$6.00 Postpaid

QUANTITY PRICE:

5 Sets for.....\$5.50 each Postpaid

10 Sets for.....\$5.00 each Postpaid

Get FREE CATALOG A

America's No. 1 source of supply for experimenters, hobbyists. World's largest variety of Optical Items, Bargains galore... War surplus—Imported—Domestic! Microscopes, Telescopes, Satellite Telescopes, Infrared sniperscopes and parts. Prisms, Lenses, Reticles, Mirrors and dozens of other hard-to-get Optical Items.

WRITE FOR
FREE CATALOG A



ORDER BY STOCK NUMBER . SEND CHECK OR MONEY ORDER . SATISFACTION GUARANTEED!

EDMUND SCIENTIFIC CO., BARRINGTON, N. J.

**THIS SCAN IS
COURTESY OF THE
LENNY SILVER
COLLECTION**